Catch and Effort Statistics of the Canadian Groundfish Fishery on the Pacific Coast in 1981

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ABSTRACT

Leaman, J. E. 1982. Catch and effort statistics of the Canadian groundfish fishery on the Pacific coast in 1981. Can. Tech. Rep. Fish. Aquat. Sci. 1124: iv + 90 p.

Catch and effort statistics for the Canadian groundfish fishery (excluding halibut) on the Pacific coast in 1981 are presented. Statistics are shown by major areas, minor areas, and INPFC areas, in metric tons (t). Total landings in 1981 were 37,337 t, slightly less than 1980. The bulk (86%) of the catch was taken by trawl gear. The main species landed were Pacific cod, hake, Pacific ocean perch, sablefish, and lingcod.

Key words: catch statistics, effort statistics, groundfish, Pacific coast.

RÉSUMÉ

Leaman, J. E. 1982. Catch and effort statistics of the Canadian groundfish fishery on the Pacific coast in 1981. Can. Tech. Rep. Fish. Aquat. Sci. 1124: iv + 90 p.

Le présent rapport donne les statistiques sur les prises et sur l'effort de pêche concernant le poisson de fond (excepté le flétan) dans les eaux canadiennes du Pacifique en 1981. Les statistiques, exprimées en tonne métrique (t), sont présentées pour chaque région principale, région secondaire et région de la CIPPN. En 1981, le total des débarquements s'élevait à 37 337 t, ce qui représente une légère baisse par rapport à 1980. La majeure partie des prises (86%) a été capturée à l'aide de chaluts. Les principales espèces débarquées sont les suivantes: morue, merlu, sébaste à longue mâchoire, morue charbonnière et morue-lingne.

Mots-clés: statistiques sur les prises, statistiques sur l'effort, poisson de fond, côte du Pacifique.

INTRODUCTION

The Canadian fishery for groundfish along Canada's west coast involves many species of demersal fishes, the majority of which are caught by bottom and midwater trawls. The remaining catch is taken either by trap, longline, handline, troll, or incidentally while shrimp trawling. Excluding halibut, these groundfish landings contributed an average of 26,698 metric tons (t) to the annual fish production of Canada during 1971-80. The total landings of major groundfish species, caught by all types of gear from all areas on the Pacific coast during 1971-81, are shown in Table 1.

The Fisheries Research Branch, Pacific Biological Station, Nanaimo, B.C., maintained port liaison officers at Vancouver, Steveston and Prince Rupert during 1981. These persons conducted interviews with captains of trawl, longline and trap vessels to collect information on effort expended for groundfish catches, by species, area and depths as well as other pertinent data. The landings not covered by these interviews were obtained from the sales slips collected by the Statistical Services of Fisheries Management in Vancouver. All available 1981 data are included in this final report. While changes are rare, individuals using these data for analyses should refer to the author for confirmation.

Total 1981 landings of 37,337 t were 40% above the 1971-80 mean but declined 5% from the 1980 level. Pacific cod landings of 6,708 t accounted for 18% of the total catch even though showing a 23% decline from the previous year. Landings of hake rose to 5,691 t due to use of on-board processing and the development of new markets for land-processed fish. There were marked decreases in landings of dogfish (1,151 t), pollock (1,251 t), and turbot (946 t).

This portion of the document is the traditional report of landings (t) by species, by discrete domestic (minor) fishing areas and by larger United States-Canadian (major) areas, commonly called Pacific Marine Fisheries Commission (PMFC) areas.

MAJOR STATISTICAL AREA DIVISIONS

Standardization between Canada and the United States in reporting of groundfish catches on the Pacific coast has resulted in assignment of catches to certain major statistical areas. In the United States these International areas are used by the Pacific Marine Fisheries Commission in their annual summaries of catch statistics. Figure 1 illustrates the major statistical areas off British Columbia and gives their numerical designation. The following is a complete description of the boundaries of these areas.

Table 1. Total Canadian landings (t) of groundfish by species, taken by all gear from all areas on the Pacific coast, 1971-81.

Species	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	Mean 1971-80	1981
English sole	652	502	740	663	1,100	1,307	1,469	809	1,609	1,244	956	1,500
Rock sole	1,955	957	819	948	1,740	2,157	1,252	1,312	1,874	1,843	1,486	1,059
Petrale sole	506	578	474	684	442	340	289	230	202	222	397	290
Dover sole	1,355	1,100	830	822	1,030	1,158	700	736	861	1,273	986	1,245
Rex sole	192	163	144	137	99	133	99	102	203	145	142	190
Starry flounder	133	207	63	61	91	50	89	74	296	118	118	198
Turbot	-	130	563	370	953	1,310	1,599	2,326	1,826	1,448	1,053	946
Other flatfish	208	124	15	6	2	9	15	25	59	57	52	183
Pacific cod	4,996	8,665	7,487	8,828	10,272	10,107	7,717	6,750	9,554	8, 703	8,308	6,708
Lingcod	2,853	2,392	2,136	2,540	2,846	2,320	2,248	2,004	2,098	2,151	2,359	2,467
Sablefish	327	1,103	965	503	925	795	1,088	831	2,031	3,793	1,236	3,888
Pollock	-	174	86	48	103	1,322	890	2,407	3,387	2,201	1,062	1,251
Hake	-	-	-	-	-	-	2	2	818	606	143	5,691
Pacific ocean perch	1,337	2,327	1,398	1,529	2,040	1,745	2,716	3,864	2,819	5,290	2,506	5,103
Other rockfish	948	1,787	1,429	1,136	1,214	2,543	5,235	6,608	5,962	4,476	3,134	4,857
Misc. species	103	122	108	97	182	220	289	163	215	303	180	266
Dogfish	130	115	5,025	1,070	714	242	1,730	3,126	4,757	4,547	2,146	1,151
Animal food	428	513	297	174	37	100	49	112	214	191	212	42
Reduction	71	71	69	274	211	299	181	302	240	528	225	302
Total	16,194	21,030	22,648	19,890	24,001	26,157	27,657	31,783	38,485	39,139	26,698	37,337

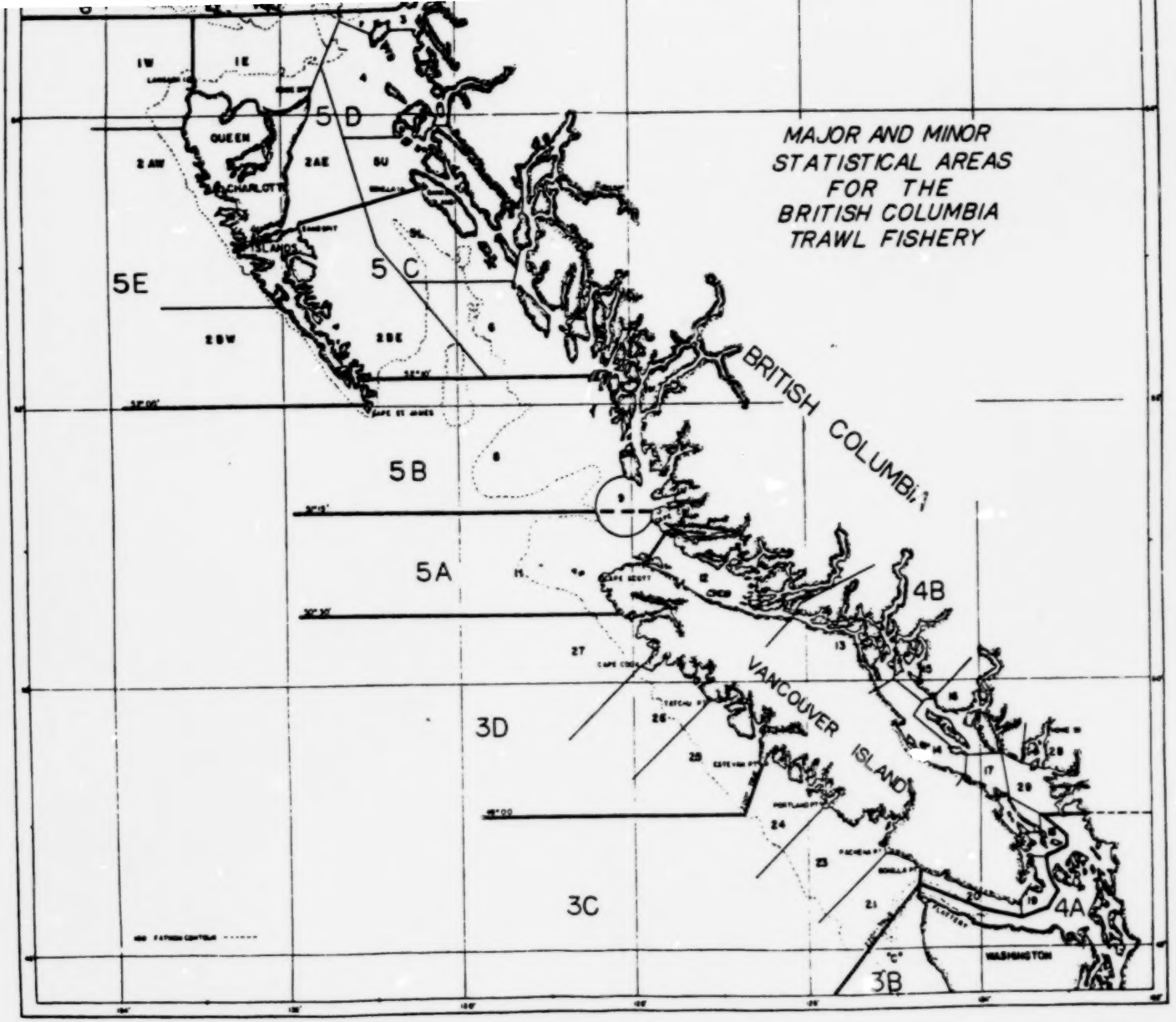

MAJOR AND MINOR
STATISTICAL AREAS
FOR THE
BRITISH COLUMBIA
TRAWL FISHERY
5D
5E
5C
5B
5A
4B
3D
3C
4A
3B
BRITISH COLUMBIA
VANCOUVER ISLAND
QUEEN
CHARLOTTE
ISLANDS
WASHINGTON

Fig. 1.

AREA 3B--NORTHWEST WASHINGTON COAST

From Latitude 47°20'N to a line bearing 220° True from the mid-point of the Bonilla-Tatoosh line and crossing said parallel of latitude. This area includes the Quillayute and Umatilla Reef grounds and the shallow waters off Cape Flattery.

AREA 3C--SOUTHWEST COAST VANCOUVER ISLAND

From the northern boundary of Area 3B to a line bearing 200° True from Estevan Point southward to the 49° parallel of latitude, thence westward along said parallel. This area includes the Cape Flattery Spit, the Swiftsure Bank, La Perouse Bank (Big Bank or 40 mile Bank), the Cabbage Patch, the Firing Range, the Lennard Island and Sydney Inlet grounds, and the inshore waters of Barkley Sound.

AREA 3D--NORTHWEST COAST VANCOUVER ISLAND

From the northern boundary of Area 3C to Latitude 50°30'N. This area includes the Nootka, Esperanza, and Kyuquot grounds as well as the Estevan Deep.

AREA 4A--PUGET SOUND

The United States territorial waters inside the Bonilla-Tatoosh line including the Juan de Fuca Strait and Puget Sound. No Canadian catch from this area.

AREA 4B--STRAIT OF GEORGIA

The Canadian waters from the Bonilla-Tatoosh line inside to a line drawn north and south (Mag.) through Pine Island at the upper end of Queen Charlotte Strait. This area, defined simply as the Strait of Georgia, includes all Canadian inshore grounds of Juan de Fuca Strait, Johnstone and Queen Charlotte straits, and Georgia Strait.

AREA 5A--SOUTH QUEEN CHARLOTTE SOUND

From the northern boundaries of Areas 4B and 3D to Latitude 51°15'N. This area includes all grounds incorporated in the Cape Scott Bank and a portion of the grounds in the gully between the Cape Scott Bank and the Goose Island Bank. It also includes catches from the Virgin Rocks ground.

AREA 5B--NORTH QUEEN CHARLOTTE SOUND

From Latitude 51°15'N to Latitude 52°00'N on the westward side of Cape St. James and from Latitude 51°15'N to Latitude 52°10'N on the eastward side of Cape St. James. This area includes all grounds associated with the

Goose Island Bank and the remaining portion of the grounds in the gully between the Goose Island Bank and the Cape Scott Bank.

AREA 5C--SOUTH HECATE STRAIT

From Latitude 52°10'N to a line drawn from Spit Point (Sandspit) on Moresby Island to the southern tip of Bonilla Island. This area includes the grounds known as the "Horseshoe" and the "Ole Spot" in the central region of the Strait.

AREA 5D--NORTH HECATE STRAIT

From the northern boundary of Area 5C to Latitude 54°40'N, limited to the westward by Longitude 133°W across Dixon Entrance. This area includes the Two Peaks ground (northeast of Rose Spit), the Butterworth-Warrior edge, the Fingers (southwest of Archibald Island), the Oval Hill ground, the White Rock ground (northwest of Bonilla Island), the Skidegate Inlet ground, the Fife Point grounds, the grounds lying 25 mi southwest of Seal Rocks, and grounds in Dixon Entrance.

AREA 5E--WEST COAST QUEEN CHARLOTTE ISLANDS

From Latitude 52°00'N to 54° 40' N, limited to the eastward by Longitude 133°W across Dixon Entrance.

AREA 6--ALASKA

Encompasses waters bounded on the south by Latitude 54°40'N and on the west by Longitude 147°W.

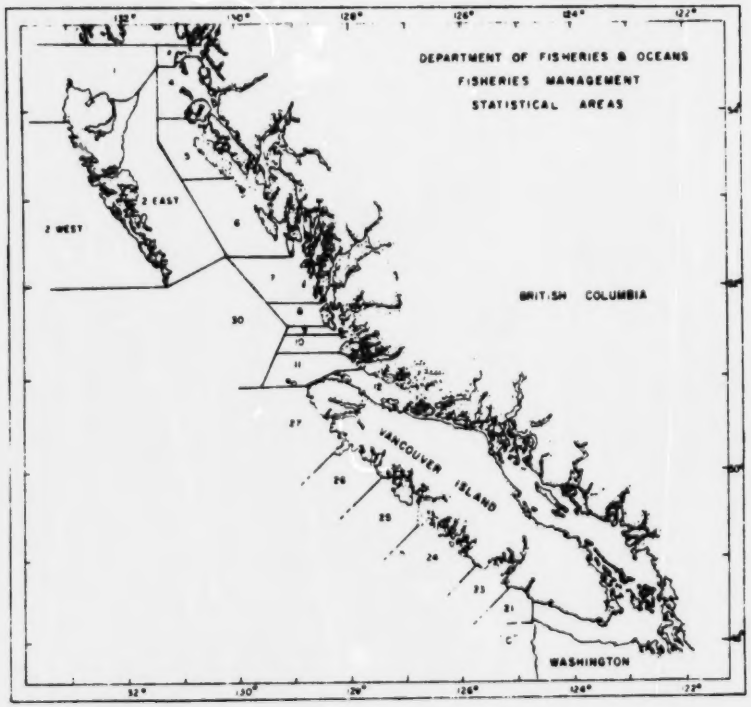
MINOR STATISTICAL AREA DIVISIONS

Minor areas are used to give more detailed information on region of capture of groundfish. They are areas within major areas and are basically the former Fisheries Management statistical areas with some modifications. Figure 2 illustrates the areas; the modifications are catalogued below:

1. Minor Area 1 has been divided into two minor areas, 1E and 1W. This boundary lies along Longitude 133°W.

2. Minor Area 2 West has been divided into two minor areas, 2AW and 2BW. This boundary lies along 52°40'N Latitude.

3. The boundary between Area 2 East and Area 4 has been shifted northwestward to Rose Spit. This brings the whole of the "Two Peaks" grounds within Area 4.


DEPARTMENT OF FISHERIES & OCEANS
FISHERIES MANAGEMENT
STATISTICAL AREAS
2 WEST
2 EAST
BRITISH COLUMBIA
VANCOUVER ISLAND
WASHINGTON

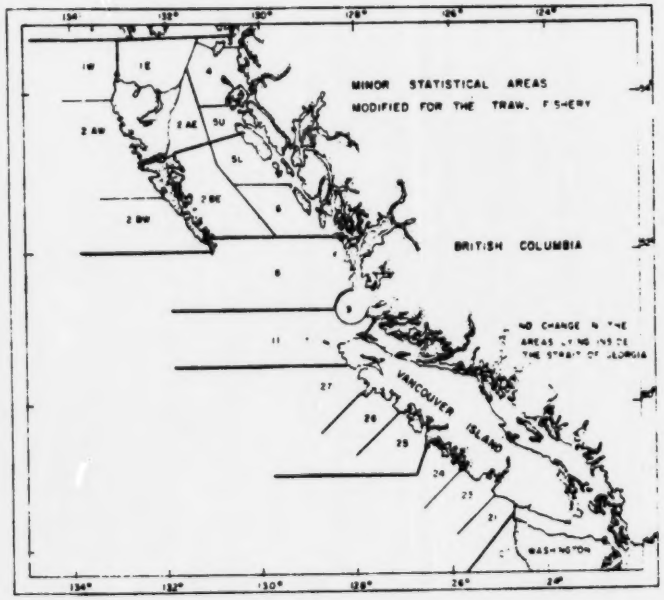

MINOR STATISTICAL AREAS
MODIFIED FOR THE TRAW. FISHERY
BRITISH COLUMBIA
VANCOUVER ISLAND

Fig. 2.

4. Minor Area 5 has been divided into two sub-areas, designated 5U and 5L, this boundary lies along the Sandspit-Bonilla Island line, which is the internationally agreed line of division between north and south Hecate Strait (Areas 5D and 5C).

5. The boundary between Areas 5D and 5C has been continued through Area 2 East to divide it into two minor areas, 2AE and 2BE.

6. The southern boundary of Areas 2 East and 6 has been shifted to lie along 52°10'N Latitude to conform with the boundary between Areas 5C and 5B.

7. Area 8 has been expanded to include the whole of the Goose Island Bank. This has involved (a) shifting the northern boundary and eliminating Area 7, (b) shifting the southern boundary and eliminating the offshore portion of Area 9, and (c) the elimination of Area 30, previously used for offshore catches in Queen Charlotte Sound. There is, in this report, no westward limit to Area 8.

8. Area 9 has been changed and is now a circle 24 mi in diameter surrounding the Sea Otter group and the Virgin Rocks ground. It is considered to be part of Area 5A.

9. Area 11 has been expanded to include all of the Cape Scott Bank. This has meant the elimination of Area 10 and the addition of the part of Area 27 lying northward of 50°30'N Latitude. This is to conform with the boundary between Areas 5A and 3D.

10. The western limit of area 12 is now Bates passage.

11. The boundary between Areas 24 and 25 has been shifted to lie along the boundary between Areas 3D and 3C.

12. The boundary between Areas 23 and 24 has been shifted northwards to Portland Point and it lies on a bearing of 225° True. This is to bring the whole of the ground known as Firing Range (which formerly lay on the boundary between these two areas) entirely within Area 23.

All other minor areas remain the same as those defined by the Fisheries Management Statistical Chart.

The following shows the relationship between the major and the minor areas:

Major areas		Minor areas
6	Alaska	Southeastern, Yakutat[1]
5E	West Coast Queen Charlotte Islands	1W, 2AW, 2BW
5D	North Hecate Strait	1E, 2AE, 3, 4, 5U
5C	South Hecate Strait	2BE, 5L, 6
5B	North Queen Charlotte Sound	8
5A	South Queen Charlotte Sound	9, 11
3D	Northwest Coast Vancouver Island	27, 26, 25
3C	Southwest Coast Vancouver Island	24, 23, 21
3B	Northwest Washington Coast	"C"
4B	Strait of Georgia[2]	12, 13, 14, 15, 16, 17, 18, 19, 20, 28, 29

[1]Southeastern - from 54°40'N to 137°W. Yakutat from 137°W to 147°W.

[2]Including Johnstone and Queen Charlotte straits and the Canadian portion of the Strait of Juan de Fuca.

TRAWL FISHERY

In 1981, catch and effort data were collected by port liaison officers for 79%, by weight, of the total trawl landings. Through the cooperation of the Statistical Services Unit of Fisheries Management, the remaining 21% of the landings were recorded from sales slips, on which no effort is available. Catch-per-unit-effort (CPUE) statistics obtained from the interview data were used to estimate the effort expended for the catch reported on these sales slips.

From total landed catch and total estimated effort data, an annual average CPUE (t/h) was calculated for each major fishing area. Also calculated was the percentage of total catch and the total effort expended in each of these areas. These last two statistics not only serve to show relative importance of each area, but are used in the calculation of the "success ratio". This parameter is defined as the percent of total catch divided by percent of total effort.

Total landings in 1981 (excluding dumped[3] and discarded[4] fish) by the British Columbia trawl fleet were 32,025 t, 2% below the 1980 total. Effort expended decreased 18% to 38,608 h resulting in an overall CPUE of 0.829 t/h, an increase of 19% over the 1980 level.

Pacific cod remained the strongest contributor to the trawl fishery, even though the landings of 6,676 t were 23% less than in 1980. Landings of pollock declined 43% to 1,251 t. Turbot landings decreased 35% to 946 t. There were also decreases in trawl landings of rock sole (1,059 t), sablefish (233 t) and dogfish (637 t). There was a marked increase (≈5,000 t) in landings of hake to 5,691 t. Trawl landings of lingcod at 1,729 t rose 32% from 1980. Landings of rockfish species at 9,590 t constituted 30% of the trawl landings. Pacific ocean perch (5,103 t) accounted for 53% of these rockfish landings.

Annual trawl catch and effort data are shown in Tables 2-5. Landings by month, species, and major area are presented in Tables 6-13. Landings by species, month, and minor area are given in Tables 14-42.

AREA 4B--STRAIT OF GEORGIA

Total landings from this area increased 30% to 5,464 t, and effort decreased to 9,783 h; resulting in a 47% increase in CPUE, to 0.558 t/h. Hake and Pacific cod were the main species caught.

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[3]Fish caught and retained but eventually rejected as being unsuitable for any utilization.

[4]Fish caught and discarded at sea by fishermen.

AREA 3C--SOUTHWEST COAST VANCOUVER ISLAND

Landings increased 38% due to the large increase in landings of hake (3,283 t) from this area. The amount of effort expended dropped to 6,129 h effecting an increase in CPUE to 1.035 t/h. Hake, Pacific cod, lingcod, and Pacific ocean perch were the major species landed.

AREA 3D--NORTHWEST COAST VANCOUVER ISLAND

Decreases in effort (1,149 h) and landings (614 t) resulted in a 29% decline in CPUE, to 0.535 t/h. Landings of Pacific cod (41 t) and Dover sole (52 t) dropped to less than half of the previous year's landings. Pacific ocean perch and lingcod were the major species landed.

AREA 5A--SOUTH QUEEN CHARLOTTE SOUND

Both total effort (2,152 h) and total catch (1,131 t) decreased approximately 35% causing a slight decline in CPUE to 0.525 t/h. There were 50% decreases in landings of Pacific cod and rock sole from 1980. The main species caught were Pacific cod, lingcod, and turbot.

AREA 5B--NORTH QUEEN CHARLOTTE SOUND

Total catch of 5,139 t remained at about the same level as in 1980. Effort in this area dropped 11% to 5,214 h while CPUE showed an increase of 15% to 0.986 t/h. The major species taken in this area were Pacific ocean perch, Pacific cod, lingcod, and silvergray rockfish.

AREA 5C--SOUTH HECATE STRAIT

Both total catch (4,163 t) and total effort (4,509 h) decreased 26% from the previous year, resulting in the same level of CPUE (0.923 t/h). Pacific ocean perch and Pacific cod, whose landings declined approximately 30%, were still the main species taken from this area.

AREA 5D--NORTH HECATE STRAIT

This area contributed 21% (6,708 t) of the total British Columbia trawl production. The large drop in landings of Pacific cod and pollock contributed to the 20% decline in total landings. Overall CPUE decreased 8% to 0.755 t/h. English sole and Dover sole were the other main species landed.

AREA 5E--WEST COAST QUEEN CHARLOTTE ISLANDS.

There was a 34% decrease in the amount of effort (785 h) expended in this area with a 12% increase in landings (2,462 t). This resulted in an overall 70% increase of CPUE to 3.137 t/h. Total rockfish landings of 2,348 t accounted for 95%, of which yellowmouth rockfish (925 t) and Pacific ocean perch (708 t) were the dominant species.

The following species were observed in trawl landings in British Columbia in 1981.

Family and common name	Scientific name
Fishes	
Acipenseridae	
Green sturgeon	Acipenser medirostris (Ayres)
Anarhichadidae	
Wolf-eel	Anarrhichthys ocellatus (Ayres)
Anoplopomatidae	
Sablefish	Anoplopoma fimbria (Pallas)
Clupeidae	
American shad	Alosa sapidissima (Wilson)
Pacific herring	Clupea harengus pallasi (Valenciennes)
Embiotocidae	
Pile perch	Rhacochilus vacca (Girard)
Gadidae	
Pacific cod, true cod or gray cod	Gadus macrocephalus (Tilesius)
Pacific hake	Merluccius productus (Ayres)
Walleye pollock	Theragra chalcogramma (Pallas)
Hexagrammidae	
Lingcod	Ophiodon elongatus (Girard)
Osmeridae	
Eulachon	Thaleichthys pacificus (Richardson)
Pleuronectidae	
Arrowtooth flounder or turbot	Atheresthes stomias (Jordan and Gilbert)
Petrale sole	Eopsetta jordani (Lockington)
Rex sole	Glyptocephalus zachirus (Lockington)
Flathead sole	Hippoglossoides elassodon (Jordan, Gilbert)
Butter sole	Isopsetta isolepis (Lockington)
Rock sole	Lepidopsetta bilineata (Ayres)
Slender sole	Lyopsetta exilis (Jordan and Gilbert)
Dover sole	Microstomus pacificus (Lockington)
English sole	Parophrys vetulus (Girard)
Starry flounder	Platichthys stellatus (Pallas)
Curlfin sole	Pleuronichthys decurrens (Jordan, Gilbert)
Sand sole	Psettichthys melanostictus (Girard)
Rajidae	
Big skate	Raja binoculata (Girard)
Longnose skate	Raja rhina (Jordan and Gilbert)

Family and common name	Scientific name
Scorpaenidae	
Rougheye rockfish	*Sebastes aleutianus* (Jordan, Evermann)
Pacific ocean perch	*Sebastes alutus* (Gilbert)
Redbanded rockfish	*Sebastes babcocki* (Thompson)
Shortraker rockfish	*Sebastes borealis* (Barsukov)
Silvergray rockfish	*Sebastes brevispinis* (Bean)
Copper rockfish	*Sebastes caurinus* (Richardson)
Darkblotched rockfish	*Sebastes crameri* (Jordan)
Splitnose rockfish	*Sebastes diploproa* (Gilbert)
Greenstriped rockfish	*Sebastes elongatus* (Ayres)
Widow rockfish	*Sebastes entomelas* (Jordan and Gilbert)
Yellowtail rockfish	*Sebastes flavidus* (Ayres)
Rosethorn rockfish	*Sebastes helvomaculatus* (Ayres)
Quillback rockfish	*Sebastes maliger* (Jordan and Gilbert)
Bocaccio	*Sebastes paucispinis* (Ayres)
Canary rockfish	*Sebastes pinniger* (Gill)
Redstripe rockfish	*Sebastes proriger* (Jordan and Gilbert)
Yellowmouth rockfish	*Sebastes reedi* (Westrheim and Tsuyki)
Yelloweye rockfish	*Sebastes ruberrimus* (Cramer)
Sharpchin rockfish	*Sebastes zacentrus* (Gilbert)
Shortspine thornyhead	*Sebastolobus alascunus* (Bean)
Squalidae	
Spiny dogfish	*Squalus acanthias* (Linnaeus)
INVERTEBRATES	
Cancridae	
Dungeness crab	*Cancer magister* (Dana)
Rock crab	*Cancer productus*
Lithodidae	
Box crab	Unknown species
Maiidae	
Tanner crab	*Chionoecetes bairdi* (Rathbun)
Octopoda	
Octopus or devilfish	*Octopus* sp.
Pectinidae	
Giant Pacific scallop	*Pecten caurinus* (Gould)
Teuthoidea	
Squid	*Loligo opalescens* (Berry)

Table 2. Total catch (t) (excludes dumped and discarded fish) and related effort (h) for the British Columbia trawl fleet in 1981.

	Major Area									
	4B		3C		3D		5A		5B	
Month	Catch	Effort	Catch	Effort	Catch	Effort	Catch	Effort	Catch	Effort
January	483.36	1,163	13.46	32	8.38	8	-	-	-	-
February	966.90	2,355	101.21	116	23.00	47	15.30	40	233.86	174
March	823.96	758	121.78	162	37.10	72	119.61	88	82.09	73
April	818.55	751	576.69	960	135.28	158	48.95	88	599.98	463
May	730.81	379	608.84	1,083	175.87	288	238.73	576	702.98	516
June	86.11	381	1,689.28	1,929	152.03	406	393.48	809	2,045.01	2,090
July	145.81	470	735.19	615	22.19	34	102.30	117	586.04	504
August	156.60	412	1,358.68	356	14.69	39	10.82	35	245.02	483
September	173.24	335	692.27	482	-	-	131.03	219	355.62	557
October	465.37	916	443.15	379	32.07	69	22.24	56	214.88	258
November	344.85	1,088	3.71	13	13.88	28	42.75	116	56.83	67
December	268.24	775	0.15	2	-	-	5.60	8	16.39	29
Total	5,463.80	9,783	6,344.41	6,129	614.49	1,149	1,130.81	2,152	5,138.70	5,214
CPUE (t/h)	0.558		1,035		0.535		0.525		0.986	
% catch	17.06		19.81		1.92		3.53		16.04	
% effort	25.34		15.87		2.98		5.57		13.51	
Success ratio	0.67		1.25		0.64		0.63		1.19	

Table 2 (cont'd)

Month	Major Area							
	5C		5D		5E		Total	
	Catch	Effort	Catch	Effort	Catch	Effort	Catch	Effort
January	74.94	134	214.72	339	125.54	20	920.40	1,696
February	519.42	649	503.66	747	231.29	52	2,594.64	4,180
March	179.48	399	419.30	535	299.89	63	2,083.21	2,150
April	449.80	607	644.73	811	53.62	17	3,327.60	3,855
May	106.31	197	1,082.91	1,614	315.88	88	3,962.33	4,741
June	981.58	704	1,150.67	1,609	69.55	38	6,567.71	7,966
July	483.41	419	1,025.23	1,048	82.98	10	3,183.15	3,217
August	801.70	856	525.63	749	6.75	6	3,119.89	2,936
September	233.94	356	572.23	720	558.83	207	2,717.16	2,876
October	295.39	135	297.79	296	283.03	84	2,053.92	2,193
November	27.71	40	217.62	305	338.12	163	1,045.47	1,820
December	9.00	13	53.70	114	96.71	37	449.79	978
Total	4,162.68	4,509	6,708.19	8,887	2,462.19	785	32,025.27	38,608
CPUE (t/h)	0.923		0.755		3.137		0.829	
% catch	13.00		20.95		7.69			
% effort	11.68		23.02		2.03			
Success ratio	1.11		0.91		3.79			

Table 3. Total British Columbia trawl landings (t) by main species by major area in 1981 (excluding dumped and discarded fish).

Species	Major Area								Total
	4B	3C	3D	5A	5B	5C	5D	5E	
English sole	42.85	80.88	12.75	6.32	16.82	174.32	1,153.41	12.28	1,499.63
Rock sole	18.62	72.80	50.05	113.71	219.42	125.60	457.77	1.32	1,059.29
Petrale sole	5.29	177.67	15.20	23.62	17.77	16.26	26.93	7.71	290.45
Dover sole	108.63	203.50	51.95	4.73	36.66	92.18	711.61	36.08	1,245.34
Rex sole	0.75	0.09	0.12	0.06	2.85	10.63	174.62	0.83	189.95
Starry flounder	11.55	4.82	0.02	-	13.17	36.55	131.40	0.46	197.97
Turbot	23.33	82.93	16.36	154.42	132.10	93.90	435.68	7.48	946.20
Other flatfish	122.05	21.81	2.76	20.58	0.10	1.44	11.33	-	180.07
Pacific cod	1,741.77	854.48	41.25	281.94	571.12	995.48	2,184.42	5.86	6,676.32
Lingcod	63.04	603.88	75.06	182.86	547.61	58.23	197.26	1.16	1,729.10
Sablefish	7.72	120.64	11.79	4.40	13.40	27.71	30.74	16.64	233.04
Pollock	566.34	7.89	1.24	2.22	9.36	79.58	563.24	21.46	1,251.33
Hake	2,408.57	3,282.90	-	-	-	-	-	-	5,691.47
Pacific ocean perch	0.38	381.54	165.95	37.11	2,357.33	1,407.08	45.31	708.44	5,103.14
Other rockfish[a]	50.93	124.49	128.24	259.03	1,095.20	937.95	251.74	1,639.38	4,486.96
Misc. species[a]	17.89	11.02	7.81	10.11	9.62	30.49	176.45	0.24	263.63
Dogfish	269.96	284.85	16.63	24.68	-	8.93	32.40	-	637.45
Animal food[a]	0.55	-	2.54	0.41	9.50	7.72	20.83	-	41.55
Reduction[a]	3.58	28.22	14.77	4.61	86.67	58.63	103.05	2.85	302.38
Total	5,463.80	6,344.41	614.49	1,130.81	5,138.70	4,162.68	6,708.19	2,462.19	32,025.27
Effort (h)	9,783	6,129	1,149	2,152	5,214	4,509	8,887	785	38,608

[a]Refer to Table 4 for breakdown by species.

Table 4. Species landed (t) as "other flatfish", "other rockfish", "miscellaneous species", "animal food", and "reduction" by major area in 1981.

Species	Major Area								Total
	4B	3C	3D	5A	5B	5C	5D	5E	
Other flatfish									
Butter sole	-	-	-	-	-	-	4.30	-	4.30
Sand sole	0.07	-	-	-	-	1.44	6.77	-	8.28
Unspecified	121.98	21.81	2.76	20.58	0.10	-	0.26	-	167.49
Total	122.05	21.81	2.76	20.58	0.10	1.44	11.33	-	180.07
Other rockfish									
Bocaccio	0.08	3.56	7.47	13.94	35.85	3.31	3.92	0.27	68.40
Canary rockfish	0.29	12.05	53.32	46.04	138.65	115.91	11.31	2.42	379.99
Copper rockfish	-	-	-	-	3.25	0.11	0.90	-	4.26
Darkblotched rockfish	-	0.02	-	-	0.06	0.04	-	-	0.12
Greenstriped rockfish	-	0.17	-	-	-	-	-	-	0.17
Quillback rockfish	0.07	-	-	0.06	0.06	1.90	1.19	-	3.28
Redbanded rockfish	-	0.09	0.20	0.54	46.56	24.97	9.63	10.91	92.90
Redstripe rockfish	-	12.76	-	-	2.42	2.90	-	132.96	151.04
Rosethorn rockfish	-	-	-	-	0.24	-	-	0.16	0.40
Rougheye rockfish	-	3.19	4.14	-	0.95	0.05	-	108.01	116.34
Sharpchin rockfish	-	-	-	-	8.65	0.90	-	10.49	20.04
Shortraker rockfish	-	2.03	1.40	-	2.00	1.51	-	3.67	10.61
Shortspine thornyhead	-	-	-	-	1.31	0.36	3.16	4.10	8.93
Silvergray rockfish	-	-	15.31	142.35	426.47	286.58	17.52	59.33	947.56
Splitnose rockfish	0.06	1.23	0.74	-	0.17	-	-	-	2.20
Widow rockfish	-	11.55	0.04	-	0.60	0.01	-	14.52	26.72
Yelloweye rockfish	-	-	2.13	0.33	0.31	2.17	0.68	0.18	5.80
Yellowmouth rockfish	-	0.03	0.02	-	45.64	68.77	-	924.75	1,039.21
Yellowtail rockfish	5.95	20.73	17.06	20.18	264.63	37.12	51.45	8.90	426.02
Unspecified	44.48	57.08	26.41	35.59	117.38	391.34	151.98	358.71	1,182.97
Total	50.93	124.49	128.24	259.03	1,095.20	937.95	251.74	1,639.38	4,486.96

Table 4 (cont'd)

Species	Major Area								Total
	4B	3C	3D	5A	5B	5C	5D	5E	
Miscellaneous species									
American shad	–	–	–	–	0.11	–	–	–	0.11
Octopus	2.98	0.34	0.40	0.40	0.32	2.50	7.60	–	14.54
Perch	0.88	0.02	–	–	–	–	–	–	0.90
Skate	13.91	9.83	2.61	9.26	9.19	27.99	168.85	0.24	241.88
Squid	0.05	–	–	–	–	–	–	–	0.05
Sturgeon	0.07	0.83	3.97	0.45	–	–	–	–	5.32
Wolf-eel	–	–	0.59	–	–	–	–	–	0.59
Unspecified	–	–	0.24	–	–	–	–	–	0.24
Total	17.89	11.02	7.81	10.11	9.62	30.49	176.45	0.24	263.63
Animal food									
Pacific ocean perch	–	–	–	–	6.35	–	–	–	6.35
Unspecified	0.55	–	2.54	0.41	3.15	7.72	20.83	–	35.20
Total	0.55	–	2.54	0.41	9.50	7.72	20.83	–	41.55
Reduction									
Dover sole	–	–	–	–	–	5.86	–	–	5.86
Pacific ocean perch	–	–	–	–	3.63	–	–	–	3.63
Rockfish	–	–	–	–	7.55	–	–	–	7.55
Unspecified	3.58	28.22	14.77	4.61	75.49	52.77	103.05	2.85	285.34
Total	3.58	28.22	14.77	4.61	86.67	58.63	103.05	2.85	302.38

Table 5. British Columbia trawl landings (t) by species by minor area in 1981.

Species	Minor Area				
	1W	2AW	2BW	1E	2AE
English sole	11.91	0.37	-	13.48	15.10
Rock sole	1.29	0.03	-	13.87	6.86
Petrale sole	7.43	0.12	0.16	0.30	-
Dover sole	25.08	10.14	0.85	5.53	-
Rex sole	0.60	0.06	0.17	2.27	0.23
Butter sole	-	-	-	-	4.30
Sand sole	-	-	-	-	-
Turbot	3.79	3.11	0.58	14.99	-
Starry flounder	0.36	0.10	-	62.18	1.78
Other flatfish	-	-	-	-	-
Pacific cod	5.04	0.77	0.05	30.37	40.05
Lingcod	0.55	0.59	0.02	13.34	0.21
Sablefish	14.50	1.81	0.32	0.34	-
Pollock	19.28	2.15	0.02	22.50	-
Pacific ocean perch	109.22	376.59	222.62	22.21	-
Bocaccio	-	0.27	-	0.52	-
Canary rockfish	-	2.42	-	3.10	-
Redstripe rockfish	0.33	132.63	-	-	-
Rougheye rockfish	98.08	5.02	4.89	-	-
Silvergray rockfish	2.26	56.63	0.44	1.85	-
Yellowmouth rockfish	2.34	890.14	32.27	-	-
Yellowtail rockfish	-	8.90	-	3.68	-
Widow rockfish	0.04	14.48	-	-	-
Other rockfish	163.86	222.72	1.66	5.33	-
Hake	-	-	-	-	-
Octopus	-	-	-	0.31	-
Perch	-	-	-	-	-
Skate	0.24	-	-	3.08	1.81
Squid	-	-	-	-	-
Sturgeon	-	-	-	-	-
Misc. species	-	-	-	-	-
Dogfish	-	-	-	0.01	-
Reduction	-	2.85	-	-	-
Animal food	-	-	-	-	13.93
Total	466.20	1,731.90	264.05	219.26	84.27
Crab	-	-	-	-	-
Dumped fish	-	-	-	-	-
Discards	1.76	3.66	-	22.16	7.26

Table 5 (cont'd)

Species	Minor Area				
	4	5up	2BE	5 low	6
English sole	908.82	216.01	162.68	11.62	0.02
Rock sole	255.26	181.79	124.17	1.43	-
Petrale sole	13.16	13.47	12.87	3.38	0.01
Dover sole	589.83	116.26	82.91	8.97	0.31
Rex sole	159.47	12.65	9.03	0.63	0.97
Butter sole	-	-	-	-	-
Sand sole	2.38	4.38	1.44	-	-
Turbot	360.90	59.81	64.18	29.71	-
Starry flounder	62.29	5.16	36.53	0.01	-
Other flatfish	0.01	0.26	-	-	-
Pacific cod	1,275.04	838.95	982.27	13.16	0.05
Lingcod	159.34	24.38	54.11	4.12	-
Sablefish	15.92	14.49	25.81	1.84	0.05
Pollock	484.72	56.01	78.78	0.80	-
Pacific ocean perch	22.99	0.11	1,235.80	143.10	28.17
Bocaccio	1.85	1.55	2.89	0.43	-
Canary rockfish	6.51	1.69	98.41	17.44	0.05
Redstripe rockfish	-	-	2.34	0.25	0.31
Rougheye rockfish	-	-	0.05	-	-
Silvergray rockfish	9.65	6.02	234.93	50.15	1.50
Yellowmouth rockfish	-	-	68.74	-	0.02
Yellowtail rockfish	47.77	-	35.07	2.06	-
Widow rockfish	-	-	0.01	-	-
Other rockfish	71.71	90.49	409.05	9.19	5.05
Hake	-	-	-	-	-
Octopus	2.31	4.97	2.48	0.03	-
Perch	-	-	-	-	-
Skate	124.71	39.26	26.64	1.35	-
Squid	-	-	-	-	-
Sturgeon	-	-	-	-	-
Misc. species	-	-	-	-	-
Dogfish	2.75	29.64	8.93	-	-
Reduction	38.00	65.05	50.24	8.39	-
Animal food	6.90	-	7.72	-	-
Total	4,622.29	1,782.40	3,818.08	308.06	36.51
Crab	-	-	-	-	-
Dumped fish	-	-	-	-	-
Discards	920.66	-	-	-	-

Table 5 (cont'd)

Species	Minor Area				
	8	9	11	25	26
English sole	16.82	-	6.32	1.66	0.41
Rock sole	219.42	-	113.71	0.33	16.07
Petrale sole	17.77	-	23.62	10.27	0.47
Dover sole	36.66	1.23	3.50	43.20	1.53
Rex sole	2.85	-	0.06	0.03	-
Butter sole	-	-	-	-	-
Sand sole	-	-	-	-	-
Turbot	132.10	-	154.42	11.91	1.07
Starry flounder	13.17	-	-	-	-
Other flatfish	0.10	-	20.57	2.48	0.28
Pacific cod	571.10	-	281.94	14.27	2.63
Lingcod	547.61	-	182.85	27.68	10.53
Sablefish	13.40	-	4.40	8.78	0.06
Pollock	9.36	-	2.22	0.34	-
Pacific ocean perch	2,357.33	3.91	33.20	165.78	0.18
Bocaccio	35.85	-	13.93	0.45	5.57
Canary rockfish	138.65	-	46.04	10.73	5.33
Redstripe rockfish	2.42	-	-	-	-
Rougheye rockfish	0.96	-	-	4.14	-
Silvergray rockfish	426.47	-	142.34	1.88	4.03
Yellowmouth rockfish	45.64	-	-	0.02	-
Yellowtail rockfish	264.63	-	20.18	1.07	14.31
Widow rockfish	0.60	-	-	0.04	-
Other rockfish	179.98	-	36.53	18.26	3.26
Hake	-	-	-	-	-
Octopus	0.32	-	0.40	-	-
Perch	-	-	-	-	-
Skate	9.19	-	9.27	-	0.06
Squid	-	-	-	-	-
Sturgeon	-	-	0.45	-	3.56
Misc. species	0.11	-	-	-	-
Dogfish	-	-	24.68	14.53	0.82
Reduction	86.67	-	4.61	14.77	-
Animal food	9.50	-	0.41	-	-
Total	5,138.68	5.14	1,125.65	325.62	70.17
Crab	-	-	-	-	-
Dumped fish	3.49	-	6.12	-	-
Discards	598.97	-	115.91	77.21	22.33

Table 5 (cont'd)

Species	Minor Area				
	27	21	23	24	12
English sole	10.68	13.56	59.17	8.14	0.79
Rock sole	33.67	8.58	53.12	11.10	1.30
Petrale sole	4.46	12.24	94.96	70.46	-
Dover sole	7.23	9.21	157.36	36.93	-
Rex sole	0.09	-	0.06	0.03	-
Butter sole	-	-	-	-	-
Sand sole	-	-	-	-	0.05
Turbot	3.38	43.64	32.12	7.16	-
Starry flounder	0.02	1.10	2.39	1.33	0.74
Other flatfish	-	5.46	15.80	0.54	-
Pacific cod	24.37	475.19	360.29	19.00	5.05
Lingcod	36.85	34.15	506.21	63.52	0.07
Sablefish	2.95	22.03	91.70	6.92	-
Pollock	0.90	5.90	1.66	0.34	0.25
Pacific ocean perch	-	-	251.06	130.49	-
Bocaccio	1.45	-	3.56	-	-
Canary rockfish	37.28	2.52	1.37	8.16	-
Redstripe rockfish	-	-	12.76	-	-
Rougheye rockfish	-	-	0.84	2.36	-
Silvergray rockfish	9.41	-	-	-	-
Yellowmouth rockfish	-	-	0.01	0.03	-
Yellowtail rockfish	1.68	7.17	13.56	-	0.36
Widow rockfish	-	0.34	11.17	0.04	-
Other rockfish	9.37	1.58	44.72	14.32	0.21
Hake	-	2,224.86	1,058.06	-	-
Octopus	0.40	0.09	0.23	0.02	-
Perch	-	-	0.02	-	0.02
Skate	2.55	1.70	7.57	0.52	0.05
Squid	-	-	-	-	-
Sturgeon	0.41	0.20	0.63	-	-
Misc. species	0.83	-	-	-	-
Dogfish	1.28	14.19	268.50	2.17	0.12
Reduction	-	-	20.28	7.95	-
Animal food	2.54	-	-	-	-
Total	191.80	2,883.71	3,069.18	391.53	9.01
Crab	-	-	-	-	-
Dumped fish	-	-	-	-	-
Discards	12.07	553.93	446.61	28.05	0.23

Table 5 (cont'd)

Species	Minor Area				
	13	14	15	16	17
English sole	2.21	13.33	-	-	5.47
Rock sole	-	10.77	-	-	1.82
Petrale sole	-	-	-	-	-
Dover sole	-	-	-	-	-
Rex sole	-	-	-	-	0.05
Butter sole	-	-	-	-	-
Sand sole	-	-	-	-	-
Turbot	-	-	-	-	-
Starry flounder	3.32	5.75	-	-	0.10
Other flatfish	-	5.37	-	-	13.68
Pacific cod	54.59	90.14	-	-	23.16
Lingcod	0.39	-	-	-	0.31
Sablefish	0.51	0.90	-	-	-
Pollock	2.66	55.71	-	178.25	16.01
Pacific ocean perch	-	-	-	-	-
Bocaccio	-	-	-	-	-
Canary rockfish	-	-	-	-	-
Redstripe rockfish	-	-	-	-	-
Rougheye rockfish	-	-	-	-	-
Silvergray rockfish	-	-	-	-	-
Yellowmouth rockfish	-	-	-	-	-
Yellowtail rockfish	-	0.98	-	-	-
Widow rockfish	-	-	-	-	-
Other rockfish	-	0.81	-	-	2.55
Hake	1.70	523.07	8.82	98.46	182.14
Octopus	-	0.07	-	-	0.02
Perch	-	0.04	-	-	0.31
Skate	-	0.76	-	-	0.39
Squid	-	-	-	-	-
Sturgeon	-	-	-	-	-
Misc. species	-	-	-	-	-
Dogfish	92.83	27.58	-	-	2.35
Reduction	-	-	-	-	0.60
Animal food	-	-	-	-	-
Total	158.21	735.28	8.82	276.71	248.96
Crab	-	-	-	-	0.23
Dumped fish	-	-	-	4.54	-
Discards	35.78	43.00	6.35	7.32	5.24

Table 5 (cont'd)

Species	Minor Area 18	19	20	29	Total
English sole	4.84	5.21	10.53	0.48	1499.63
Rock sole	0.41	1.38	2.72	0.19	1,059.29
Petrale sole	0.07	4.07	1.16	-	290.45
Dover sole	0.98	3.71	103.92	-	1,245.34
Rex sole	-	-	0.70	-	189.95
Butter sole	-	-	-	-	4.30
Sand sole	-	-	0.03	-	8.28
Turbot	0.29	15.81	7.23	-	946.20
Starry flounder	1.28	0.11	0.25	-	197.97
Other flatfish	55.43	23.13	22.75	1.63	167.49
Pacific cod	334.27	974.12	221.03	39.42	6,676.32
Lingcod	4.23	49.35	8.50	0.19	1,729.10
Sablefish	0.12	4.37	1.82	-	233.04
Pollock	68.96	9.31	5.11	230.09	1,251.33
Pacific ocean perch	-	-	0.38	-	5,103.14
Bocaccio	-	0.08	-	-	68.40
Canary rockfish	-	0.29	-	-	379.99
Redstripe rockfish	-	-	-	-	151.04
Rougheye rockfish	-	-	-	-	116.34
Silvergray rockfish	-	-	-	-	947.56
Yellowmouth rockfish	-	-	-	-	1,039.21
Yellowtail rockfish	-	0.20	4.38	0.02	426.02
Widow rockfish	-	-	-	-	26.72
Other rockfish	11.16	15.27	13.17	1.43	1,331.68
Hake	0.57	0.03	159.66	1,434.10	5,691.47
Octopus	0.63	1.53	0.69	0.04	14.54
Perch	0.51	-	-	-	0.90
Skate	3.36	4.48	4.77	0.12	241.88
Squid	0.01	-	-	0.04	0.05
Sturgeon	-	0.01	0.06	-	5.32
Misc. species	-	-	-	-	0.94
Dogfish	17.48	128.69	0.36	0.54	637.45
Reduction	0.01	-	2.96	-	302.38
Animal food	0.32	-	0.23	-	41.55
Total	504.93	1,241.15	572.41	1,708.29	32,025.27
Crab	2.70	-	-	-	2.93
Dumped fish	-	-	-	-	14.15
Discards	15.01	28.05	15.97	67.73	3,035.26

TABLES OF MONTHLY CATCH (t)

BY MAJOR AREA

TABLE 6. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 4B STRAIT OF GEORGIA

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	5.37	14.88	1.52	1.90	3.00	2.73	.26	.65	2.48	.97	4.91	4.18	42.85
ROCK S.	7.03	6.31	.44	1.06		.52	.01	.05	.15	1.12	.82	1.11	18.62
PETRALE S.	.07	.20			.01	.75	3.52	.05	.26	.28	.15		5.29
DOVER S.	.90	.36		1.91	6.92	37.28	9.05	13.60	17.28	17.27	3.94	.12	108.63
REX SOLE				.23		.36	.11			.05			.75
STARRY FLDR	1.30	5.22	.43	.12					.07	1.24	1.48	1.69	11.55
TURBOT	.29	.83	.86	.61	.01	.50	.82	5.59	3.09	7.28	3.13	.32	23.33
OTHER FLAT.	10.53	17.30	13.77	7.69	7.01	5.43	10.38	4.18	4.98	20.94	9.53	10.31	122.05
PACIFIC COD	248.21	331.36	132.18	111.82	29.51	25.49	96.15	101.38	47.44	214.46	247.60	156.17	1741.77
LINGCOD		.19		1.42	1.41	2.64	19.89	13.47	5.67	11.05	7.29	.01	63.04
SABLEFISH	.06	.58	.39	.04	.13	1.66	1.33	.04	.06	2.25	.97	.21	7.72
POLLOCK	106.80	359.64	83.90	1.50	8.61			.17	.46	3.03	1.47	.76	566.34
HAKE	45.85	182.09	576.62	687.65	671.83	4.21		15.17	85.38	110.39		29.38	2408.57
OCEAN PERCH						.38							.38
OTHER ROCKF.	5.23	10.49	6.07	1.41	1.92	2.18	3.63	1.22	4.03	11.06	2.07	1.62	50.93
MISC. SP.	2.49	4.61	1.30	.93	.45	.38	.66	.80	.94	2.15	1.93	1.25	17.89
DOGFISH	48.25	32.84	6.48	.20						61.83	59.25	61.11	269.96
ANIMAL FOOD	.32							.23					.55
REDUCTION	.66			.06		1.60			.95		.31		3.58
TOTAL	483.36	966.90	823.96	818.55	730.81	86.11	145.81	156.60	173.24	465.37	344.85	268.24	5463.80

TABLE 7. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 3C SOUTHWEST COAST VANCOUVER ISLAND

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		2.70		7.54	26.87	12.92	9.71	5.32	4.80	10.72	.30		80.88
ROCK S.		.17		10.59	25.99	21.50	1.48	2.97	4.64	5.44	.02		72.80
PETRALE S.	6.52	14.92	24.84	20.79	11.55	35.96	14.90	14.67	16.72	16.51	.29		177.67
DOVER S.	5.70	3.90	16.87	99.94	21.97	32.72	15.86	4.12	.92	1.50			203.50
REX SOLE				.09									.09
STARRY FLDR		.25	.18	.06	4.14	.19							4.82
TURBOT		.11		1.70	7.50	42.01	14.73	14.20	1.89	.79			82.93
OTHER FLAT.				.23	7.22	4.53	5.46	.09	1.14	2.99		.15	21.81
PACIFIC COD		1.94	.97	139.70	264.42	337.39	29.34	31.34	25.04	22.97	1.37		854.48
LINGCOD				7.59	40.38	256.73	50.20	69.19	116.41	61.95	1.43		603.88
SABLEFISH		5.29	.84	5.53	14.34	23.12	26.86	20.52	18.94	5.20			120.64
POLLOCK		1.10		.06	.36	5.55		.82					7.89
HAKE						797.65	514.77	1189.11	496.14	285.23			3282.90
OCEAN PERCH	1.24	67.28	35.17	116.66	117.70	43.31	.18						381.54
OTHER ROCKF.		1.46	5.30	13.06	18.96	35.86	34.78	6.18	3.85	5.04			124.49
MISC. SP.		.23	.01	2.82	2.83	1.92	.31	.15	1.78	.97			11.02
DOGFISH			36.50	141.33	39.36	26.91	16.61			23.84	.30		284.85
ANIMAL FOOD		1.86	1.10	9.00	5.25	11.01							28.22
REDUCTION													
TOTAL	13.46	101.21	121.78	576.69	608.84	1689.28	735.19	1358.68	692.27	443.15	3.71	.15	6344.41

TABLE 8. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 3D NORTHWEST COAST VANCOUVER ISLAND

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.63	.13	1.04	8.92	1.66		.35		.02			12.75
ROCK S.		2.77		2.85	4.47	29.42	1.25	6.36		2.79	.14		50.05
PETRALE S.		.13	6.61	1.06	1.05	5.62	.50	.13		.10			15.20
DOVER S.			10.58	11.19	21.04	5.20	1.42	.35		1.53	.64		51.95
REX SOLE				.05	.03	.04							.12
STARRY FLDR						.02							.02
TURBOT					11.91	1.82	1.53						16.36
OTHER FLAT.					2.48						1.10		2.76
PACIFIC COD		4.19	.02	5.54	9.77	13.79	1.37	4.22		.28			41.25
LINGCOD				5.09	16.10	44.70	4.59	1.38		1.33	1.02		75.06
SABLEFISH	.18	.10	2.13	1.51	3.03	3.33	.69	.76		2.54	.66		11.79
POLLOCK		.05	.06		.23	.90				.06			1.24
HAKE													165.95
OCEAN PERCH	4.65	3.41	12.19	70.10	75.42						.18		128.24
OTHER ROCKF.	3.55	8.18	5.10	15.82	10.52	40.35	10.81	1.14		22.92	9.85		7.81
MISC. SP.		2.93		.55	1.52	2.64	.03				.14		16.63
DOGFISH		.61		15.37						.50	.15		2.54
ANIMAL FOOD						2.54							14.77
REDUCTION			.28	5.11	9.38								614.49
TOTAL	8.38	23.00	37.10	135.28	175.87	152.03	22.19	14.69		32.07	13.88		

TABLE 9. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 5A SOUTH QUEEN CHARLOTTE SOUND

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.44	1.31	.31	.77	1.38	.91		.70	.35		.15	6.32
ROCK S.		2.58	4.26	1.10	57.12	39.52	3.53	1.58	3.33	.62		.07	113.71
PETRALE S.		.15	.28	.38	2.38	3.88	1.85	.50	12.03	.21	1.56	.40	23.62
DOVER S.						1.84	1.86			1.03			4.73
REX SOLE							.06						.06
STARRY FLDR													
TURBOT													
OTHER FLAT.													
PACIFIC COD			2.50			112.27	40.34						154.42
LINGCOD		1.25	15.52	8.80	8.58	4.74			.94	.87			20.58
SABLEFISH		.21	.18	1.92	106.46	103.60	9.88	.08	23.90	4.30	.46		281.94
POLLOCK				.06	28.84	48.77	15.05	8.66	71.59	2.47	9.98		182.86
HAKE					.14	3.44	.21		.55	2.04	4.47	1.13	4.40
OCEAN PERCH					.08	2.14							2.22
OTHER ROCKF.				.04									
MISC. SP.	2.30	80.20	35.46	30.87	14.52	22.55							37.11
DOGFISH		1.40	.54	3.49	48.65	5.74							259.03
ANIMAL FOOD	8.37	13.96	.34		4.12	.32		17.99	7.81	26.23	3.78	37.11	
REDUCTION									.12	.05	.07	259.03	
TOTAL									2.01			10.11	
	15.30	119.61	48.95	238.73	4.61				.41			24.68	
					393.48	102.30	10.82	131.03	22.24	42.75	5.60	.41	
												4.61	
												1130.81	

BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 5B NORTH QUEEN CHARLOTTE SOUND

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.16	2.65	1.39	3.33	4.62	.40	1.03	1.34	1.53	.26	.11	16.82
ROCK S.		2.26	.10	.74	9.76	19.74	45.95	67.09	58.34	13.86	1.58		219.42
PETRALE S.		.04	.40	.41	1.87	4.48	2.73	1.59	3.38	2.26	.56	.05	17.77
DOVER S.		.04		.27	1.95	31.46	2.55	.39					36.66
REX SOLE		.03	.01	.25	.26	2.28	.02						2.85
STARRY FLDR		13.17											13.17
TURBOT		.01		.12	1.09	67.57	12.89		18.83	31.49	.10		132.10
OTHER FLAT.				.01	.09								.10
PACIFIC COD		5.61	36.19	106.40	120.13	154.16	23.82	23.28	23.21	58.86	15.84	3.62	571.12
LINGCOD		.11	.25	9.44	46.12	147.94	100.99	80.50	140.91	18.59	2.74	.02	547.61
SABLEFISH		.14		.20	.69	5.96	.80	4.52	.67	.35	.07		13.40
POLLOCK		.05			.43	7.15	.20		.16	1.35	.02		9.36
HAKE										1.86			2357.33
OCEAN PERCH	193.65		225.15	356.40	1255.07	324.98	.22						1095.20
OTHER ROCKF.	18.28	42.35	244.62	149.72	271.58	61.73	65.99	108.11	84.61	35.62	12.59		9.62
MISC. SP.	.31	.14	.25	2.96	4.57	.15	.41	.67	.12	.04			9.50
DOGFISH													86.67
ANIMAL FOOD			3.15		6.35								5138.70
REDUCTION			7.58	8.18	62.08	8.83							
TOTAL	233.86	82.09	599.98	702.98	2045.01	586.04	245.02	355.62	214.88	56.83	16.39		

TABLE 11. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 5C SOUTH HECATE STRAIT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	10.70	12.14	29.95	49.63	7.32	2.38	5.97	23.02	24.81	5.42	1.38	1.60	174.32
ROCK S.	3.14	17.48	11.99	26.22	17.33	22.02	8.80	14.90	2.74	.67	.27	.04	125.60
PETRALE S.	.18	.14	4.79	1.84	.08	1.05	1.79	2.26	1.62	1.78	.65	.08	16.26
DOVER S.		.01	3.48	5.54	.28	15.32	12.50	47.23	7.45	.37			92.18
REX SOLE	.32	.28	.12	.30	.62	1.20	.99	3.59	3.08	.03		.10	10.63
STARRY FLDR	.93	4.97	25.93	1.06	1.56	1.30	.04	.72		.04			36.55
TURBOT	1.45	1.39	2.02	1.58	27.16	25.01	7.37	14.69	12.96	.27			93.90
OTHER FLAT.			1.18	.12	.14								1.44
PACIFIC COD	33.92	433.30	74.78	179.20	35.98	101.68	45.08	76.51	5.14	2.12	1.81	5.96	995.48
LINGCOD	1.76	1.78	7.42	3.61	4.53	6.68	10.64	14.43	3.18	3.62	.13	.45	58.23
SABLEFISH	10.26	.46	.96	5.11	.02	3.83	2.53	3.69	.75	.05		.05	27.71
POLLOCK	6.59	19.07	1.33	.80	.21	4.81	8.54	4.42	2.34	31.46		.01	79.58
HAKE													
OCEAN PERCH		.73	1.71	27.39	.02	467.60	262.10	521.14	126.07	.25	.07		1407.08
OTHER ROCKF.	3.72	8.98	11.56	124.16	5.24	320.04	102.11	61.02	43.09	234.61	23.35	.07	937.95
MISC. SP.	1.95	4.93	2.21	9.04	5.63	.50	2.32	2.86	.62	.25	.05	.13	30.49
DOGFISH	.02	8.70	.05	.16									
ANIMAL FOOD				7.72									8.93
REDUCTION		5.06		6.32	.19	8.16	12.63	11.22	.09	14.45		.51	7.72
TOTAL	74.94	519.42	179.48	449.80	106.31	981.58	483.41	801.70	233.94	295.39	27.71	9.00	58.63
													4162.68

TABLE 12. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 5D NORTH HECATE STRAIT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	12.28	92.58	65.57	181.69	399.76	128.48	88.23	75.67	54.15	19.22	26.91	8.87	1153.41
ROCK S.	11.81	8.96	55.25	37.92	84.50	123.07	43.83	47.55	34.14	3.58	7.07	.09	457.77
PETRALE S.	.59	.21	1.97	.82	3.20	6.16	2.23	1.26	3.53	3.93	2.69	.34	26.93
DOVER S.				.83	22.65	166.02	198.20	117.61	141.97	54.40	7.76	2.17	711.61
REX SOLE	.60	2.42	1.21	2.58	9.84	20.88	38.46	28.57	62.68	5.44	1.70	.24	174.62
STARRY FLDR	25.27	12.51	28.73	4.41	23.04	19.50	7.41	3.64	3.95	2.69	.13	.12	131.40
TURBOT	.23	12.32	5.69	14.27	108.06	82.27	137.36	44.63	14.86	13.23	1.95	.81	435.68
OTHER FLAT.		4.92	3.15	2.21	.95	.01				.09			11.33
PACIFIC COD	83.26	213.67	212.65	267.79	277.38	409.81	373.03	118.95	109.57	46.87	62.52	8.92	2184.42
LINGCOD	2.30	7.47	1.57	13.38	45.99	50.82	29.17	18.50	12.60	8.66	5.79	1.01	197.26
SABLEFISH	2.53	4.86	.05	.53	1.20	3.80	4.25	2.22	7.68	1.58	1.28	.76	30.74
POLLOCK	63.11	61.33	7.20	5.57	29.61	66.02	59.08	23.67	64.46	89.57	78.74	14.88	563.24
HAKE													
OCEAN PERCH	.01	.22			.36	1.40	1.27	.37	13.99	13.15	1.23	13.31	45.31
OTHER ROCKF.	4.19	18.73	2.45	63.33	37.07	26.42	19.71	25.35	19.39	27.76	6.20	1.14	251.74
MISC. SP.	5.74	20.11	18.99	22.64	30.68	24.85	19.26	12.14	12.53	4.99	3.96	.56	176.45
DOGFISH		25.78	.26		.13				1.84		4.39		32.40
ANIMAL FOOD				18.04				.92	1.87				20.83
REDUCTION	2.80	17.57	14.56	8.72	8.49	21.16	3.74	4.58	13.02	2.63	5.30	.48	103.05
TOTAL	214.72	503.66	419.30	644.73	1082.91	1150.67	1025.23	525.63	572.23	297.79	217.62	53.70	6708.19

TABLE 13. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH - INTERNATIONAL AREA 5E WEST COAST QUEEN CHARLOTTE IS.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.74	11.17							.23		.09	.05	12.28
ROCK S.		1.29							.03				1.32
PETRALE S.	1.32	6.03			.06	.16					.12	.02	7.71
DOVER S.	25.02	3.73	5.38		.13	.76			.12	.11	.34	.49	36.08
REX SOLE	.48	.12			.06	.08			.09				.83
STARRY FLDR	.02	.34			.01				.09				.46
TURBOT	2.42	1.33			.09	.58			.10	2.40	.04	.52	7.48
OTHER FLAT.													
PACIFIC COD	1.15	3.37			.01	.05			.60	.48	.09	.11	5.86
LINGCOD	.26	.17				.02		.06	.18	.07	.33	.07	1.16
SABLEFISH	6.80	2.53	5.08	.05	.12	.08			.53	1.16	.24	.05	16.64
POLLOCK	.24	.19				.02			.94	18.49	.41	1.17	21.46
HAKE													
OCEAN PERCH	25.75	65.51	43.15	53.57	207.79	33.29	73.72	3.34	65.70	39.41	22.03	75.18	708.44
OTHER ROCKF.	61.25	135.36	246.28		107.24	34.51	9.26	3.35	490.22	219.57	313.29	19.05	1639.38
MISC. SP.	.09	.15											.24
DOGFISH													
ANIMAL FOOD													
REDUCTION					.37					1.34	1.14		2.85
TOTAL	125.54	231.29	299.89	53.62	315.88	69.55	82.98	6.75	558.83	283.03	338.12	96.71	2462.19

TABLES OF MONTHLY CATCH (t)

BY MINOR AREA

TABLE 14. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 1W

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.74	11.17											11.91
ROCK SOLE		1.29											1.29
PETRALE S.	1.32	6.03									.08		7.43
DOVER SOLE	17.35	2.33	5.38								.02		25.08
REX SOLE	.48	.12											.60
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT	2.42	1.33									.04		3.79
STAR.FLDR	.02	.34											.36
OTHER FLAT.													
PACIFIC COD	1.15	3.37								.46	.06		5.04
LINGCOD	.26	.17								.05	.07		.55
SABLEFISH	6.80	2.49	5.08							.09	.04		14.50
POLLOCK	.24	.19								18.48	.37		19.28
OCEAN PERCH	25.07	63.15	19.07								1.93		109.22
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF	56.29	41.79									.33		.33
SIL'GRAY RF													98.08
YEL'MOUTH R										2.25	.01		2.26
YEL'TAIL RF											2.34		2.34
WIDOW RF											.04		.04
OTHER RF		93.58	69.04							1.12	.12		163.86
HAKE													
OCTOPUS													
PERCH													
SKATE	.09	.15											.24
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL	112.23	227.50	98.57							22.45	5.45		466.20
CRAB													
DUMPED FISH													
DISCARDS	1.13										.63		1.76

TABLE 15. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 2AW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.									.23		.09	.05	.37
ROCK SOLE													
PETRALE S.	7.67	1.39			.06				.03				.03
DOVER SOLE					.13						.04	.02	.12
REX SOLE					.06				.03	.11	.32	.49	10.14
BUTTER SOLE													.06
FLATHEAD S.													
SAND SOLE					.09								
TURBOT					.01				.10	2.40		.52	3.11
STAR.FLDR									.09				.10
OTHER FLAT.													
PACIFIC COD					.01				.60	.02	.03	.11	.77
LINGCOD		.04			.12			.06	.18	.02	.26	.07	.59
SABLEFISH									.34	1.06	.20	.05	1.81
POLLOCK	.67	2.36	24.08		182.85	18.15	1.96	3.34	.94	.01	.03	1.17	2.15
OCEAN PERCH									51.80	39.41	20.10	31.87	376.59
BOCACCIO						.45				.27			.27
CANARY RF					1.12				1.88	.09			2.42
REDSTR. RF					3.70				46.81	16.03	68.67		132.63
ROUGHEYE RF					9.43	.45			.76	.54	.02		5.02
SIL'GRAY RF					86.83	8.56	9.26	3.35	27.60	1.58	14.22		56.63
YEL'MOUTH R					.44	2.70			375.18	192.93	217.38		890.14
YEL'TAIL RF									3.24	.25	2.27		8.90
WIDOW RF					5.71	3.15			5.45	1.40	7.63		14.48
OTHER RF	4.96		177.25						24.06	3.11	.25	4.23	222.72
HAKE													
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD					.37								
TOTAL	13.30	3.79	201.33		290.93	33.46	11.22	6.75	539.32	1.34	1.14		2.85
CRAB										260.57	332.65	38.58	1731.90
DUMPED FISH													
DISCARDS										2.27	1.39		3.66

TABLE 16. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 2BW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.													
ROCK SOLE						.16							.16
PETRALE S.						.76			.09				.85
DOVER SOLE						.08			.09				.17
REX SOLE													
BUTTER SOLE													
FLATHEAD S.						.58							.58
SAND SOLE													
TURBOT													
STAR.FLDR						.05							.05
OTHER FLAT.						.02							.02
						.08			.19				.32
PACIFIC COD				.05		.02							.02
LINGCOD													
SABLEFISH				53.57	24.95	15.13	71.76		13.91			43.30	222.62
POLLOCK													
									4.36				
OCEAN PERCH									.44			.53	4.89
BOCACCIO						18.83			.44				.44
CANARY RF												13.00	32.27
REDSTR. RF													
ROUGHEYE RF						.36							
SIL'GRAY RF												1.30	1.66
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
HAKE													
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL				53.62	24.95	36.07	71.76		19.52			58.13	264.05
CRAB													
DUMPED FISH													
DISCARDS													

TABLE 17. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 1E

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.11		.10	6.95	1.83	2.05	2.00				.44		13.48
ROCK SOLE	1.95	.25	9.36	1.16			.06	.54			.55		13.87
PETRALE S.						.08		.22					.30
DOVER SOLE						1.06	2.16		.31	.71	.11	1.18	5.53
REX SOLE		.12		.04	.22	.28	.76	.70		.02	.13		2.27
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT				1.69	2.20	.59	3.69		.15	4.41	1.48	.78	14.99
STAR.FLDR	24.90	7.58	27.84					.32		1.47	.07		62.18
OTHER FLAT.													
PACIFIC COD	2.22	14.57	4.57	1.58	2.63	.37	1.18	.96		.15	1.32	.82	30.37
LINGCOD		.67		1.75	.14	9.06			1.23		.19	.30	13.34
SABLEFISH		.07					.02		.02			.23	.34
POLLOCK	6.89	.72		2.88		.25	1.16			.11	6.69	3.80	22.50
OCEAN PERCH									.57	7.19	1.14	13.31	22.21
BOCACCIO										.21	.09	.22	.52
CANARY RF				2.55				.43		.12			3.10
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF		.25				.25			.88	.47			1.85
YEL'MOUTH R													
YEL'TAIL RF		1.34				1.42		.43				.49	3.68
WIDOW RF													
OTHER RF	.35			1.01		.67			2.90			.40	5.33
HAKE													
OCTOPUS	.14	.10	.03	.04									.31
PERCH													
SKATE	.18	.69	.17	1.98							.06		3.08
SQUID													
STURGEON													
MISC. SP.													
DOGFISH		.01											.01
REDUCTION													
ANIMALFOOD													
TOTAL	36.74	26.37	42.07	21.63	7.02	16.08	11.03	3.60	6.06	14.86	12.27	21.53	219.26
CRAB													
DUMPED FISH													
DISCARDS						4.58	9.14			2.27	3.63	2.54	22.16

TABLE 18. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 2AE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.06		11.37	3.67								15.10
ROCK SOLE		.05	2.87	3.94									6.86
PETRALE S.													
DOVER SOLE													
REX SOLE					.23								.23
BUTTER SOLE		4.30											4.30
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR		.94	.07		.77								1.78
OTHER FLAT.													
PACIFIC COD		4.02	.33	26.89	8.81								40.05
LINGCOD				.21									.21
SABLEFISH													
POLLOCK													
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
HAKE													
OCTOPUS													
PERCH													
SKATE					1.81								1.81
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD				13.93									13.93
TOTAL		9.37	3.27	56.34	15.29								84.27
CRAB													
DUMPED FISH													
DISCARDS				7.26									7.26

TABLE 19. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	3.17	41.53	37.90	145.44	389.06	119.80	83.77	45.38	25.55	7.76	3.33	6.13	908.82
ROCK SOLE	1.67	1.33	5.43	5.15	48.73	90.53	26.45	44.17	28.89	2.21	.70		255.26
PETRALE S.	.02	.06	1.69	.22	2.47	4.05	1.87	.28	1.03	1.20	.22	.05	13.16
DOVER SOLE				.72	22.53	159.40	185.80	76.58	84.57	53.41	5.83	.99	589.83
REX SOLE	.06	.38	.47	1.41	8.68	19.86	37.49	27.39	57.36	5.33	.89	.15	159.47
BUTTER SOLE			.08	2.21									
FLATHEAD S.	.07	6.35	5.69	7.88	74.00	75.74	131.54	38.39	12.90	.09			2.38
SAND SOLE	34	.44	.73	3.93	21.53	19.50	7.41	3.32	3.95	8.22	.09	.03	360.90
TURBOT						.01				.96	.06	.12	62.29
STAR.FLDR													.01
OTHER FLAT.	2.78	48.30	20.25	101.91	195.34	355.74	367.69	100.86	57.67	23.02	1.12	.36	1275.04
	.09	2.46	.82	9.98	41.83	40.78	27.68	18.32	9.75	6.86	.66	.11	159.34
PACIFIC COD	.29	.02		.39	1.10	3.47	4.05	1.00	3.43	1.57	.11	.49	15.92
LINGCOD	56.11	16.42	2.35	1.55	27.13	64.88	57.60	23.29	64.35	89.07	70.90	11.07	484.72
SABLEFISH													
POLLOCK	.01	.22			.36	1.40	1.25	.37	13.42	5.96			22.99
		.03			.21	.11				1.50			1.85
OCEAN PERCH					2.06	3.39	.20	.86					6.51
BOCACCIO													
CANARY RF						.77	2.91	2.24	2.16	1.57			9.65
REDSTR. RF		6.40		.01	5.10	7.71	6.68	10.17	4.28	5.54	1.88		47.77
ROUGHEYE RF	2.81	1.20	1.04	2.94	8.53	9.82	9.24	10.69	9.07	12.78	3.59		71.71
SIL'GRAY RF													
YEL'MOUTH R	.09	.47	.07	.33	.45	.48	.19		.12	.06	.01	.04	2.31
YEL'TAIL RF													
WIDOW RF	.90	7.43	11.22	12.55	24.11	23.30	19.01	11.72	10.09	3.49	.80	.09	124.71
OTHER RF													
		.56	.22										
HAKE		7.35		1.08	.13				1.84				
OCTOPUS				4.11	6.20	13.65	3.12		6.37	.21	.02		2.75
PERCH								.92	1.87				38.00
SKATE													6.90
SQUID													
STURGEON													
MISC. SP.													
	68.41	140.95	87.96	301.81	879.55	1014.39	973.95	415.95	398.67	230.81	90.21	19.63	4622.29
DOGFISH		4.58	.45	18.15	33.14	163.42	46.24	361.71	112.31	129.41	29.48	21.77	920.66
REDUCTION													
ANIMALFOOD													
TOTAL													
CRAB													
DUMPED FISH													
DISCARDS													

1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 5 UP

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	9.00	50.99	27.57	17.94	5.21	6.62	2.46	30.28	28.61	11.46	23.13	2.74	216.01
ROCK SOLE	8.19	7.33	37.60	27.66	35.77	32.54	17.33	2.84	5.25	1.37	5.82	.09	181.79
PETRALE S.	.57	.15	.28	.60	.73	2.03	.36	.76	2.51	2.72	2.47	.29	13.47
DOVER SOLE				.10	.12	5.56	10.25	41.04	57.08	.28	1.83		116.26
REX SOLE	.54	1.92	.74	1.13	.71	.74	.21	.48	5.31	.09	.68	.10	12.65
BUTTER SOLE													
FLATHEAD S.		.37	3.06		.95								
SAND SOLE	.16	5.97		4.69	31.86	5.94	2.14	6.24	1.81	.61	.39		4.38
TURBOT	.04	3.54	.08	.49	.74				.01	.26			59.81
STAR.FLDR		.26											5.16
OTHER FLAT.													.26
PACIFIC COD	78.26	146.78	187.49	137.39	70.60	53.71	4.16	17.13	51.90	23.70	60.08	7.75	838.95
LINGCOD	2.22	4.33	.76	1.44	4.01	.98	1.50	.18	1.62	1.80	4.93	.61	24.38
SABLEFISH	2.25	4.77	.05	.14	.11	.33	.17	1.22	4.23	.01	1.17	.04	14.49
POLLOCK	.11	44.19	4.85	1.14	2.48	.88	.31	.39	.10	.40	1.15	.01	56.01
OCEAN PERCH							.02				.09		.11
BOCACCIO	.31	.03		.02	.22	.97							1.55
CANARY RF					.10	1.03	.15	.18			.23		1.69
REDSTR. RF							.27	.18		5.29	.28		6.02
ROUGHEYE RF	.71	9.48	1.41	56.80	20.84	.28	.27	.17	.11	.27	.13	.02	90.49
SIL'GRAY RF	1.04	1.81	.78	.45	.11	.10	.03	.06	.11	.03	.39	.06	4.97
YEL'MOUTH R	3.37	9.60	6.72	7.30	4.21	.96	.02	.36	2.22	1.41	2.71	.38	39.26
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
HAKE	2.80	25.21	.04	7.64	2.30	7.50	.63	4.58	6.66	2.41	4.39		29.64
OCTOPUS		10.22	14.55								5.28	.48	65.05
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH	20.64	67.72	10.89	71.48	82.87	1.81	47.17	92.33	119.75	24.49	39.51	5.44	584.10
REDUCTION													
ANIMALFOOD													
TOTAL	109.57	326.95	285.98	264.93	181.07	120.17	40.28	106.09	167.53	52.11	115.15	12.57	1782.40
CRAB													
DUMPED FISH													
DISCARDS													

TABLE 21. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 2BE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	10.70	12.14	29.95	48.39	7.32	2.36	5.97	23.01	17.83	3.29	.12	1.60	162.68
ROCK SOLE	3.14	17.48	11.99	24.84	17.33	22.02	8.80	14.90	2.74	.62	.27	.04	124.17
PETRALE S.	.18	.14	4.79	1.84	.03	1.04	1.73	2.26	.51	.27		.08	12.87
DOVER SOLE		.01	3.48	5.54	.28	14.71	12.32	42.54	3.66	.37			82.91
REX SOLE	.32	.28	.12	.27	.62	1.20	.99	3.50	1.60	.03		.10	9.03
BUTTER SOLE													
FLATHEAD S.													1.44
SAND SOLE			1.18	.12	.14								64.18
TURBOT	1.45	1.39	2.02	1.58	6.48	24.95	5.83	14.33	5.88	.27			36.53
STAR.FLDR	.93	4.97	25.93	1.04	1.56	1.30	.04	.72		.04			
OTHER FLAT.													
PACIFIC COD	33.92	433.30	74.42	170.52	35.98	101.17	43.21	76.46	3.92	1.60	1.81	5.96	982.27
LINGCOD	1.76	1.78	7.42	3.28	4.09	6.59	10.64	14.43	2.61	.93	.13	.45	54.11
SABLEFISH	10.26	.46	.96	5.11	.02	3.76	1.32	3.30	.55	.02		.05	25.81
POLLOCK	6.59	19.07	.89	.80	.21	4.81	8.54	4.42	2.30	31.14		.01	78.78
OCEAN PERCH		.73	1.56	27.39	.02	440.25	153.87	509.59	102.07	.25	.07		1235.80
BOCACCIO	.49	.08			.06	1.81				.45			2.89
CANARY RF	.39	.27		.23	.04	4.82	12.63	4.62	14.91	57.97	2.53		98.41
REDSTR. RF						1.47			.87				2.34
ROUGHEYE RF						.05							.05
SIL'GRAY RF				.02	.13	18.95	36.21	20.47	12.34	144.28	2.53		234.93
YEL'MOUTH R						51.23	17.51						68.74
YEL'TAIL RF		.03		.01		.08	21.49	5.19	.74	7.22	.31		35.07
WIDOW RF										.01			.01
OTHER RF	2.84	8.60	10.45	120.48	2.51	221.76	10.04	28.89	2.88	.27	.26	.07	409.05
HAKE												.01	2.48
OCTOPUS	.40	1.28	.24	.27	.06	.15	.01	.06					
PERCH													
SKATE	1.55	3.65	1.97	7.57	5.56	.35	2.31	2.81	.62	.08	.05	.12	26.64
SQUID													
STURGEON													
MISC. SP.													
DOGFISH	.02	8.70	.05	.16									8.93
REDUCTION		5.06		6.32		8.16	6.77	11.22	.09	12.11		.51	50.24
ANIMALFOOD				7.72									7.72
TOTAL	74.94	519.42	177.42	433.50	82.44	932.99	360.23	782.72	176.12	261.22	8.08	9.00	3818.08
CRAB													
DUMPED FISH													
DISCARDS	2.64	3.90		1.48	43.19	10.44	29.62	43.97	31.75	28.58	1.81		197.38

TABLE 22. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 5 LOW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.				1.24				.01	6.98	2.13	1.26		11.62
ROCK SOLE				1.38						.05			1.43
PETRALE S.					.05		.06		1.11	1.51	.65		3.38
DOVER SOLE						.61	.18	4.69	3.49				8.97
REX SOLE				.03				.08	.52				.63
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE					20.68	.05	1.54	.36	7.08				29.71
TURBOT													.01
STAR.FLDR				.01									
OTHER FLAT.													
													13.16
PACIFIC COD			.36	8.68		.46	1.87	.05	1.22	.52			4.12
LINGCOD				.33	.44	.10			.57	2.68			1.84
SABLEFISH						.05	1.21	.39	.17	.02			.80
POLLOCK			.44						.04	.32			
													143.10
OCEAN PERCH			.15			22.66	108.22	11.54	.53		.43		.43
BOCACCIO													17.44
CANARY RF				3.40	1.25	.01		.67	2.47	8.34	1.30		.25
REDSTR. RF						.08				.17			
ROUGHEYE RF													50.15
SIL'GRAY RF			1.11		1.25	10.07	3.28	1.17	3.86	14.72	14.69		
YEL'MOUTH R										1.19	.87		2.06
YEL'TAIL RF													
WIDOW RF													9.19
OTHER RF				.02		8.02	.95		.20				
													.03
HAKE				.03									
OCTOPUS										.17			1.35
PERCH				1.18									
SKATE													
SQUID													
STURGEON													
MISC. SP.													
													8.39
DOGFISH					.19		5.86			2.34			
REDUCTION													
ANIMALFOOD													308.06
TOTAL			2.06	16.30	23.86	42.11	123.17	18.96	28.24	34.16	19.20		
													53.39
CRAB													
DUMPED FISH				.02		16.00	9.21	3.72	22.63	1.81			
DISCARDS													

TABLE 23. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.													
ROCK SOLE						.02							.02
PETRALE S.													
DOVER SOLE						.01							.01
REX SOLE									.31				.31
BUTTER SOLE									.97				.97
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR													
OTHER FLAT.													
PACIFIC COD													
LINGCOD						.05							.05
SABLEFISH													
POLLOCK						.02			.03				.05
OCEAN PERCH													
BOCACCIO						4.69			23.48				28.17
CANARY RF													
REDSTR. RF						.05							.05
ROUGHEYE RF						.31							.31
SIL'GRAY RF													
YEL'MOUTH R						1.07					.43		1.50
YEL'TAIL RF						.02							.02
WIDOW RF													
OTHER RF						.24			4.81				5.05
HAKE													
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL						6.48			29.60		.43		36.51
CRAB													
DUMPED FISH													
DISCARDS						3.24			26.08				29.32

TABLE 24. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.16	2.65	1.39	3.33	4.62	.40	1.03	1.34	1.53	.26	.11	16.82
ROCK SOLE		2.26	.10	.74	9.76	19.74	45.95	67.09	58.34	13.86	1.58		219.42
PETRALE S.		.04	.40	.41	1.87	4.48	2.73	1.59	3.38	2.26	.56	.05	17.77
DOVER SOLE		.04		.27	1.95	31.46	2.55	.39					36.66
REX SOLE		.03	.01	.25	.26	2.28	.02						2.85
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT		.01		.12	1.09	67.57	12.89		18.83	31.49	.10		132.10
STAR.FLDR		13.17											13.17
OTHER FLAT.				.01	.09								.10
PACIFIC COD		5.61	36.19	106.40	120.12	154.15	23.82	23.28	23.21	58.86	15.84	3.62	571.10
LINGCOD		.11	.25	9.44	46.12	147.94	100.99	80.50	140.91	18.59	2.74	.02	547.61
SABLEFISH		.14		.20	.69	5.96	.80	4.52	.67	.35	.07		13.40
POLLOCK		.05			.43	7.15	.20		.16	1.35	.02		9.36
OCEAN PERCH		193.65		225.15	356.40	1255.07	324.98	.22		1.86			2357.33
BOCACCIO		.64	8.98	1.63	.06	2.25	3.69		5.98	8.04	3.16	1.42	35.85
CANARY RF		.40	9.33	3.71	40.97	13.65	10.42	1.80	24.07	25.75	5.52	3.03	138.65
REDSTR. RF				2.42									2.42
ROUGHEYE RF				.91		.05							.96
SIL'GRAY RF			23.68	126.58	37.77	33.19	26.58	46.89	56.06	47.16	23.31	5.25	426.47
YEL'MOUTH R				42.57	.20	.97	1.90						45.64
YEL'TAIL RF		.40	.35	17.30	53.87	142.82	7.68	13.48	21.81	3.07	3.63	.22	264.63
WIDOW RF						.11			.19	.30			.60
OTHER RF		16.84		49.51	16.85	78.54	11.46	3.82		.30		2.66	179.98
HAKE													
OCTOPUS		.05	.13	.01	.08	.02	.01	.01	.01				.32
PERCH													
SKATE		.26	.01	.13	2.88	4.54	.14	.41	.66	.12	.04		9.19
SQUID													
STURGEON													
MISC. SP.				.11									.11
DOGFISH													
REDUCTION				7.58	8.18	62.08	8.83						86.67
ANIMALFOOD				3.15		6.35							9.50
TOTAL		233.86	82.08	599.99	702.97	2044.99	586.04	245.03	355.62	214.89	56.83	16.38	5138.68
CRAB													
DUMPED FISH											3.49		3.49
DISCARDS		29.80	37.60	37.76	48.16	93.36	41.54	39.87	104.42	125.87	28.12	12.47	598.97

TABLE 25. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.													
ROCK SOLE													
PETRALE S.													
DOVER SOLE						1.23							1.23
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR													
OTHER FLAT.													
PACIFIC COD													
LINGCOD													
SABLEFISH													
POLLOCK													
OCEAN PERCH						3.91							3.91
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
HAKE													
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL						5.14							5.14
CRAB													
DUMPED FISH													
DISCARDS													

TABLE 26. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 11

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.44	1.31	.31	.77	1.38	.91		.70	.35		.15	6.32
ROCK SOLE		2.58	4.26	1.10	57.12	39.52	3.53	1.58	3.33	.62		.07	113.71
PETRALE S.		.15	.28	.38	2.38	3.88	1.85	.50	12.03	.21	1.56	.40	23.62
DOVER SOLE						.61	1.86			1.03			3.50
REX SOLE							.06						.06
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT						112.27	40.34		.94	.87			154.42
STAR.FLDR													
OTHER FLAT.			2.50		8.57	4.74				4.30	.46		20.57
PACIFIC COD		1.25	15.52	8.80	106.46	103.60	9.88	.08	23.90	2.47	9.98		281.94
LINGCOD		.21	.18	1.92	28.84	48.77	15.05	8.66	71.58	2.04	4.47	1.13	182.85
SABLEFISH				.06	.14	3.44	.21		.55				4.40
POLLOCK					.08	2.14							2.22
OCEAN PERCH				.04		10.61	22.55						33.20
BOCACCIO		.15	5.73		.20	.47	1.60		3.27	.95	.45	1.11	13.93
CANARY RF		.27	16.18	2.23	7.80	5.70	3.38		8.11	1.92	.45		46.04
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF		1.67	57.14	32.18	9.15	24.97	.65		6.26	3.11	4.54	2.67	142.34
YEL'MOUTH R													
YEL'TAIL RF		.21		.08	7.74	9.54	.11		.34	1.71	.45		20.18
WIDOW RF													
OTHER RF			1.14	.97	5.98	7.98				.12	20.34		36.53
HAKE													
OCTOPUS			.05		.21	.13	.01						.40
PERCH													
SKATE			1.33	.35	3.15	3.89	.31			.12	.05	.07	9.27
SQUID													
STURGEON			.02	.19	.14	.10							.45
MISC. SP.													
DOGFISH		8.37	13.96	.34						2.01			24.68
REDUCTION						4.61							4.61
ANIMALFOOD										.41			.41
TOTAL		15.30	119.60	48.95	238.73	388.35	102.30	10.82	131.01	22.24	42.75	5.60	1125.65
CRAB													
DUMPED FISH											6.12		6.12
DISCARDS		10.21	4.94	7.60	9.90	50.69	12.02		1.13	3.18	16.24		115.91

TABLE 27. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 25

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.53	.13	.14	.25	.24		.35		.02			1.66
ROCK SOLE				.01	.04	.28							.33
PETRALE S.		.01	6.61	.63	.17	2.68		.13		.04			10.27
DOVER SOLE			10.58	11.19	21.04	.04		.35					43.20
REX SOLE					.03								.03
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT					11.91								11.91
STAR.FLDR													
OTHER FLAT.					2.48								2.48
PACIFIC COD		3.00	.02	.79	4.79	2.30		3.37					14.27
LINGCOD				.36	6.94	20.32				.06			27.68
SABLEFISH	.18	.10	2.13	1.51	2.42	1.68		.76					8.78
POLLOCK		.05	.06		.23								.34
OCEAN PERCH	4.65	3.41	12.19	70.10	75.43								165.78
BOCACCIO		.32			.13								.45
CANARY RF		1.75		.05	5.41	2.82		.70					10.73
REDSTR. RF													
ROUGHEYE RF	1.24		2.90										4.14
SIL'GRAY RF		1.68			.20								1.88
YEL'MOUTH R			.02										.02
YEL'TAIL RF										1.07			1.07
WIDOW RF			.04										.04
OTHER RF	2.31	.20	2.14	5.36	3.20	5.05							18.26
HAKE													
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH				14.53									14.53
REDUCTION			.28	5.11	9.38								14.77
ANIMALFOOD													
TOTAL	8.38	11.05	37.10	109.78	144.05	35.41		5.66		1.19			352.62
CRAB													
DUMPED FISH													
DISCARDS		.91	20.05		54.89					1.36			77.21

TABLE 28. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 26

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.02		.39									.41
ROCK SOLE		2.73		2.10	.29	5.14		4.86		.81	.14		16.07
PETRALE S.		.04		.21		.22							.47
DOVER SOLE										1.30	.23		1.53
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT						.18					.89		1.07
STAR.FLDR													
OTHER FLAT.										.28			.28
PACIFIC COD		1.18		.22		.06				.29	.88		2.63
LINGCOD				.74	.07	6.84		.25		2.06	.57		10.53
SABLEFISH										.06			.06
POLLOCK													
OCEAN PERCH											.18		.18
BOCACCIO						5.12					.45		5.57
CANARY RF		.04			.10	.70				3.64	.85		5.33
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF								.04			3.99		4.03
YEL'MOUTH R													
YEL'TAIL RF		.03				1.22				13.01	.05		14.31
WIDOW RF													
OTHER RF				2.13						1.13			3.26
HAKE													
OCTOPUS													
PERCH													
SKATE						.06							.06
SQUID													
STURGEON		2.89		.53							.14		3.56
MISC. SP.													
DOGFISH		.61		.15							.06		.82
REDUCTION													
ANIMALFOOD													
TOTAL		7.54		6.47	.46	19.54		5.15		22.58	8.43		70.17
CRAB													
DUMPED FISH													
DISCARDS		4.54				1.00		4.99		9.53	2.27		22.33

TABLE 29. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 27

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.08		.51	8.67	1.42							10.68
ROCK SOLE		.04		.74	4.14	24.00	1.25	1.51		1.99			33.67
PETRALE S.		.08		.23	.89	2.70	.50			.06			4.46
DOVER SOLE						5.16	1.42			.23	.42		7.23
REX SOLE				.05		.04							.09
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT						1.64	1.53				.21		3.38
STAR.FLDR						.02							.02
OTHER FLAT.													
PACIFIC COD		.01		4.54	4.98	11.43	1.37	.85		1.04	.15		24.37
LINGCOD				3.99	9.09	17.54	4.59	1.13		.42	.09		36.85
SABLEFISH					.61	1.65	.69						2.95
POLLOCK						.90							.90
OCEAN PERCH													
BOCACCIO		.56						.37		.27	.25		1.45
CANARY RF		3.60		4.55		17.41	7.72	.04		2.46	1.50		37.28
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF				3.35	.15		3.09			.80	2.02		9.41
YEL'MOUTH R													
YEL'TAIL RF				.39						.54	.75		1.68
WIDOW RF													
OTHER RF					1.33	8.04							9.37
HAKE													
OCTOPUS					.08	.31	.01						.40
PERCH													
SKATE					.87	1.66	.02						2.55
SQUID													
STURGEON		.04		.01	.34	.02							.41
MISC. SP.					.24	.59							.83
DOGFISH				.69						.50	.09		1.28
REDUCTION													
ANIMALFOOD						2.54							2.54
TOTAL		4.41		19.05	31.39	97.07	22.19	3.90		8.31	5.48		191.80
CRAB													
DUMPED FISH													
DISCARDS		.45		4.54		6.17		.91					12.07

TABLE 30. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 21

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.					4.20	3.34	.10	.07	1.93	3.92			13.56
ROCK SOLE				.51	4.16	3.91							8.58
PETRALE S.					1.53	8.98	1.09	.06	.58				12.24
DOVER SOLE					7.92	.57	.72						9.21
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE					1.46	32.94	7.67		1.57				43.64
TURBOT					1.10								1.10
STAR.FLDR					1.26	4.20							5.46
OTHER FLAT.											.17		475.19
PACIFIC COD				.18	197.16	263.86	10.15	3.57	.10	.03			34.15
LINGCOD					6.32	27.62		.18					22.03
SABLEFISH					4.97	2.37	10.13		4.56				5.90
POLLOCK						5.08		.82					
OCEAN PERCH													
BOCACCIO													2.52
CANARY RF					.67	1.30	.55						
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													7.17
YEL'TAIL RF					.72	6.45							.34
WIDOW RF						.34							1.58
OTHER RF					.41	.64	.15		.38				
HAKE						788.47	321.62	772.96	84.37	257.44			2224.86
OCTOPUS					.08	.01							.09
PERCH													
SKATE					.51	.84	.10	.02	.23				1.70
SQUID													
STURGEON					.01	.19							.20
MISC. SP.													
DOGFISH				.10		14.09							14.19
REDUCTION													
ANIMALFOOD													
TOTAL				.79	232.48	1165.20	352.28	777.68	93.72	261.39	.17		2883.71
CRAB													
DUMPED FISH				6.12	20.50	301.15	57.88	87.54	61.24	19.50			553.93
DISCARDS													

TABLE 31. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 23

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		2.70		7.54	22.08	6.35	6.77	4.01	2.87	6.55	.30		59.17
ROCK SOLE		.17		8.76	13.15	16.98	.99	2.97	4.64	5.44	.02		53.12
PETRALE S.		.67	2.02	10.25	8.63	20.51	7.18	13.05	16.14	16.22	.29		94.96
DOVER SOLE		3.34	2.29	90.32	14.05	27.27	14.07	3.60	.92	1.50			157.36
REX SOLE				.06									.06
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT		.11		.29	6.04	3.47	6.90	14.20	.32	.79			32.12
STAR.FLDR		.25	.18	.06	1.71	.19							2.39
OTHER FLAT.				.23	5.91		5.46		1.06	2.99		.15	15.80
PACIFIC COD		1.94	.70	137.19	61.68	64.97	18.20	27.24	24.47	22.70	1.20		360.29
LINGCOD				7.54	31.34	196.49	29.57	64.68	113.43	61.73	1.43		506.21
SABLEFISH		2.26	.05	5.22	9.22	18.12	16.73	20.52	14.38	5.20			91.70
POLLOCK		1.10		.05	.04	.47							1.66
OCEAN PERCH	1.24	2.13	6.17	94.80	117.71	28.83	.18						251.06
BOCACCIO				.01		.89	2.12	.37	.17				3.56
CANARY RF				.27	.18				.05	.87			1.37
REDSTR. RF						3.42	9.34						12.76
ROUGHEYE RF		.07	.77										.84
SIL'GRAY RF													
YEL'MOUTH R			.01										.01
YEL'TAIL RF				.14	.85	7.17	.48	4.31	.39	.22			13.56
WIDOW RF			.02			1.71	8.94		.50				11.17
OTHER RF		.27	.44	12.64	13.45	6.82	6.73	.51	.29	3.57			44.72
HAKE						9.19	193.15	416.15	411.78	27.79			1058.06
OCTOPUS				.10	.02	.03				.08			.23
PERCH				.02									.02
SKATE		.23	.01	2.19	1.62	.80	.19	.12	1.52	.89			7.57
SQUID													
STURGEON				.40	.19	.04							.63
MISC. SP.													
DOGFISH			34.34	141.23	39.36	12.82	16.61			23.84	.30		268.50
REDUCTION		.23		8.63	5.25	6.17							20.28
ANIMALFOOD													
TOTAL	1.24	15.47	47.00	527.94	352.48	432.71	343.61	571.74	592.93	180.38	3.53	.15	3069.18
CRAB													
DUMPED FISH													
DISCARDS		1.73	16.56	33.57	15.42	98.06	70.13	131.54	62.14	17.46			446.61

TABLE 32. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 24

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.					.59	3.22	2.84	1.24		.25			8.14
ROCK SOLE				1.32	8.68	.61	.49						11.10
PETRALE S.	6.52	14.25	22.82	10.54	1.39	6.46	6.63	1.56		.29			70.46
DOVER SOLE	5.70	.56	14.58	9.62		4.88	1.07	.52					36.93
REX SOLE				.03									.03
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT				1.41		5.60	.15						7.16
STAR.FLDR					1.33								1.33
OTHER FLAT.					.05	.33		.09	.07				.54
PACIFIC COD			.27	2.34	5.58	8.56	.99	.53	.46	.27			19.00
LINGCOD				.06	2.73	32.61	20.62	4.33	2.98	.19			63.52
SABLEFISH		3.03	.79	.31	.15	2.63	.01						6.92
POLLOCK				.02	.32								.34
OCEAN PERCH		65.15	29.00	21.85		14.49							130.49
BOCACCIO													
CANARY RF						1.81	5.97			.38			8.16
REDSTR. RF													
ROUGHEYE RF		.86	1.50										2.36
SIL'GRAY RF													
YEL'MOUTH R			.03										.03
YEL'TAIL RF													
WIDOW RF			.04										.04
OTHER RF		.26	2.51		2.69	5.30	.50	.99	2.07				14.32
HAKE													
OCTOPUS									.02				.02
PERCH													
SKATE				.10	.40		.02						.52
SQUID													
STURGEON													
MISC. SP.													
DOGFISH			2.17										2.17
REDUCTION		1.64	1.10	.37		4.84							7.95
ANIMALFOOD													
TOTAL	12.22	85.75	74.81	47.97	23.91	91.34	39.29	9.26	5.60	1.38			391.53
CRAB													
DUMPED FISH													
DISCARDS	6.80	1.98	5.21			.91	4.99	6.80		1.36			28.05

TABLE 33. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 12

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.27	.04								.40	.02	.06	.79
ROCK SOLE		.62									.68		1.30
PETRALE S.													
DOVER SOLE													
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													.05
SAND SOLE	.05												
TURBOT													.74
STAR.FLDR		.74											
OTHER FLAT.													
PACIFIC COD	1.83	1.25								.39	.26	1.32	5.05
LINGCOD										.07			.07
SABLEFISH										.02	.23		.25
POLLOCK													
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R										.16	.20		.36
YEL'TAIL RF													
WIDOW RF										.09			.21
OTHER RF	.12												
HAKE													
OCTOPUS										.02			.02
PERCH										.05			.05
SKATE													
SQUID													
STURGEON													
MISC. SP.										.10	.02		.12
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL	2.27	2.65								1.30	1.41	1.38	9.01
CRAB													
DUMPED FISH													.23
DISCARDS	.23												

TABLE 34. 1981 BRITISH COLUMBIA TRAWL LANDINGS (MT) OF GROUNDFISH FROM STATISTICAL AREA 13

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.07	.20									1.11	.83	2.21
ROCK SOLE													
PETRALE S.													
DOVER SOLE													
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT											.53	.59	3.32
STAR.FLDR		2.20											
OTHER FLAT.													
PACIFIC COD	22.31	26.57				.01				.12	3.80	1.78	54.59
LINGCOD						.07				.19	.13		.39
SABLEFISH		.48									.03		.51
POLLOCK	2.43	.23											2.66
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													1.70
HAKE		1.70											
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.										19.97	1.50	10.48	92.83
DOGFISH	39.30	21.58											
REDUC'ION													
ANIMAL FOOD													
TOTAL	64.11	52.96				.08				20.28	7.10	13.68	158.21
CRAB													
DUMPED FISH													35.78
DISCARDS	11.79	23.90				.09							

TABLE 35. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 14

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	2.33	9.87									.68	.45	13.33
ROCK SOLE	4.81	4.47	.44							.10		.95	10.77
PETRALE S.													
DOVER SOLE													
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR	1.06	1.64								1.18	.80	1.07	5.75
OTHER FLAT.	2.06	1.58								1.46	.16	.11	5.37
PACIFIC COD	6.38	32.44	7.28		1.83					32.32	6.87	4.02	90.14
LINGCOD													
SABLEFISH	.01		.34										
POLLOCK	.02	47.94			7.75					.55			.90
													55.71
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF			.98										.98
WIDOW RF													
OTHER RF	.19	.10								.47	.05		.81
HAKE		26.08		39.71	407.81			15.14		34.33			523.07
OCTOPUS	.03	.02									.02		.07
PERCH	.03	.01											.04
SKATE	.31	.30								.01	.11	.03	.76
SQUID													
STURGEON													
MISC. SP.													
DOGFISH	5.21	8.09	2.65							1.22	9.87	.54	27.58
REDUCTION													
ANIMALFOOD													
TOTAL	21.44	132.54	11.69	39.71	417.39			15.14		71.64	18.56	7.17	735.28
CRAB													
DUMPED FISH													
DISCARDS	.36	12.70		4.31	12.02					9.98	3.63		43.00

TABLE 36. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 15

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.													
ROCK SOLE													
PETRALE S.													
DOVER SOLE													
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR													
OTHER FLAT.													
PACIFIC COD													
LINGCOD													
SABLEFISH													
POLLOCK													
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
HAKE				8.82									8.82
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL				8.82									8.82
CRAB													
DUMPED FISH													
DISCARDS				6.35									6.35

TABLE 37. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 16

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.													
ROCK SOLE													
PETRALE S.													
DOVER SOLE													
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR													
OTHER FLAT.													
PACIFIC COD													
LINGCOD													
SABLEFISH													
POLLOCK	90.96	87.29											178.25
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
HAKE	22.36	35.59		20.74						1.63		18.14	98.46
OCTOPUS													
PERCH													
SKATE													
SQUID													
STURGEON													
MISC. SP.													
DOGFISH													
REDUCTION													
ANIMALFOOD													
TOTAL	113.32	122.88		20.74						1.63		18.14	276.71
CRAB													
DUMPED FISH		4.54											4.54
DISCARDS	.23	3.18		3.86								.05	7.32

TABLE 38. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 17

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	1.41	1.02	.15	.03	.95	1.26					.05	.60	5.47
ROCK SOLE	.26	.92		.12		.45						.07	1.82
PETRALE S.													
DOVER SOLE													
REX SOLE										.05			.05
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR				.08								.02	.10
OTHER FLAT.	2.37	2.54	4.18	.10		.74				.09	.88	2.78	13.68
PACIFIC COD	6.85	3.30	.89	.17	.38	1.26					.30	10.01	23.16
LINGCOD					.08	.21					.02		.31
SABLEFISH													
POLLOCK		4.18	11.68		.15								16.01
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF	.48	.35	.40		.18	.67					.22	.25	2.55
HAKE		79.22	15.32	8.82	63.34	4.21						11.23	182.14
OCTOPUS			.02										.02
PERCH	.07	.02									.09	.13	.31
SKATE	.06	.07	.10		.01	.04					.05	.06	.39
SQUID													
STURGEON													
MISC. SP.													
DOGFISH			.44									1.91	2.35
REDUCTION	.25			.04							.31		.60
ANIMALFOOD													
TOTAL	11.75	91.62	33.18	9.36	65.09	8.84				.14	1.92	27.06	248.96
CRAB	.13	.06				.04							.23
DUMPED FISH													
DISCARDS		.70										4.54	5.24

TABLE 39. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 18

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.58												
ROCK SOLE		.15	.49	.48		.33	.16	.37	.76	.55	.61	.36	4.84
PETRALE S.		.04		.18				.05	.02		.07	.05	.41
DOVER SOLE		.01				.16	.08	.10	.15	.20	.07		.07
REX SOLE											.16	.12	.98
BUTTER SOLE													
FLATHEAD S.		.13											
SAND SOLE	.13	.39	.42	.06	.01	.03	.03						
TURBOT	4.76	4.90	6.37	.04									
STAR.FLDR				6.91	3.25	1.76	1.09	1.75	.07	.03			
OTHER FLAT.	39.03	73.52	76.47	63.92	22.42	2.58	1.77	2.50	3.05	.06	.15	.02	.29
				.53	.86	.29	.16	.22	9.85	9.03	6.61	5.95	1.28
PACIFIC COD	3.35	.02	.06	.04					.57	10.35	12.08	19.78	55.43
LINGCOD		7.64	57.63	.09	.05					1.36	.24		334.27
SABLEFISH								.02	.01				4.23
POLLOCK										.05	.03	.09	.12
OCEAN PERCH													68.96
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF													
	2.34	1.05	.75	1.03	.63	.51	.54	.11	.34	2.29	.88	.69	11.16
HAKE	.14												
OCTOPUS	.09	.13	.19	.06	.03								
PERCH	.08		.04	.16	.04				.10	.05			
SKATE	.28	.41	.21	.06	.02				.04	.03	.02	.08	.57
SQUID	.01		.61	.40	.21			.11	.44	.03	.09	.02	.63
STURGEON										.39	.25	.29	.51
MISC. SP.													3.36
													.01
DOGFISH	1.05	1.68	3.39	.20									
REDUCTION	.32			.01									
ANIMALFOOD													
	52.13	90.07	146.63	74.17	27.52	5.66	3.83	5.23	15.40	24.42	27.55	32.32	504.93
TOTAL											6.29	4.87	17.48
													.01
CRAB	.26	.02	.21	.63	.40	.13	.15	.09	.02	.32	.29	.18	2.70
DUMPED FISH	5.94	.91					8.16						15.01
DISCARDS													

1987 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 19

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.26	.08			1.06		.10	.28		.02	1.53	1.88	5.21
ROCK SOLE	.12	.04		.06			.01		.03	1.02	.07	.03	1.38
PETRALE S.	.05					.23	3.52	.04	.04	.11	.08		4.07
DOVER SOLE				.05	.80		.05	.30	.01	1.12	1.38		3.71
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR	.29	.29	.33	.06		.16	.60	5.06	.52	5.20	2.98	.32	15.81
OTHER FLAT.	.11												.11
	.73	2.54	.06	.68		1.05	3.54	.59	.31	10.36	1.83	1.44	23.13
PACIFIC COD	154.69	47.53	14.03	35.82		11.87	87.12	85.54	36.14	164.78	219.69	116.91	974.12
LINGCOD				.86		.62	18.90	11.31	1.97	8.95	6.73	.01	49.35
SABLEFISH	.05	.07				.37	1.33		.05	1.38	.92	.20	4.37
POLLOCK	5.82	1.30						.14		.16	1.22	.67	9.31
OCEAN PERCH							.08						
BOCACCIO										.29			.08
CANARY RF													.29
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF													
WIDOW RF													
OTHER RF	.35	1.18	.68	.12		.01	.09	.02				.09	.20
HAKE							.39	.01	3.63	7.62	.72	.56	15.27
OCTOPUS	.55	.19	.05	.09				.03					
PERCH							.01	.08	.02	.23	.23	.08	.03
SKATE	.52	.25		.09		.02	.46	.43	.38	.76	1.02	.55	1.53
SQUID													4.48
STURGEON				.01									
MISC. SP.													.01
DOGFISH	2.70	1.12											
REDUCTION										40.53	41.57	42.77	128.69
ANIMALFOOD													
TOTAL	166.24	54.59	15.15	37.84	1.86	14.33	116.20	103.83	43.10	242.53	279.97	165.51	1241.15
CRAB													
DUMPED FISH													
DISCARDS	1.81	.05		3.88		.91		.36	2.95	11.63	6.01	.45	28.05

TABLE 41. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 20

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.	.46	3.13	.79	1.39	1.00	1.14			1.72		.90		10.53
ROCK SOLE	1.84	.04		.67		.07			.10				2.72
PETRALE S.	.02	.20			.01	.52		.01	.23	.17			1.16
DOVER SOLE	.90	.35		1.86	6.12	37.11	8.91	13.20	17.11	15.95	2.41		103.92
REX SOLE				.23		.36	.11						.70
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE	.03												.03
TURBOT		.41	.53	.50		.31	.19	.53	2.57	2.05	.14		7.23
STAR.FLDR		.25											.25
OTHER FLAT.	.53	5.28	1.98		3.76	1.90	5.76	1.84	1.61		.05	.04	22.75
PACIFIC COD	18.14	134.75	6.09	11.92	4.88	9.76	7.27	13.34	1.45	6.48	4.60	2.35	221.03
LINGCOD				.03	.47	1.44	.84	1.94	3.13	.48	.17		8.50
SABLEFISH					.13	1.29	.01	.04	.01	.32	.02		1.82
POLLOCK	.15	1.50			.21				.45	2.80			5.11
OCEAN PERCH						.38							.38
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF	1.22	.88	1.47	.22	.48	.03	.08						4.38
WIDOW RF													
OTHER RF	.46	5.91	1.41	.04	.63	.96	2.45	1.08	.06	.14	.01	.02	13.17
HAKE									85.29	74.37			159.66
OCTOPUS	.13	.34	.11	.01	.02	.05			.01		.02		.69
PERCH													
SKATE	.31	2.78	.11	.12	.10	.27	.19	.18	.06	.63	.02		4.77
SQUID													
STURGEON					.06								.06
MISC. SP.													
DOGFISH		.36											.36
REDUCTION	.41					1.60			.95				2.96
ANIMALFOOD								.23					.23
TOTAL	24.60	156.18	12.49	16.99	17.87	57.19	25.81	32.39	114.75	103.39	8.34	2.41	572.41
CRAB													
DUMPED FISH													
DISCARDS	6.18	1.16		.95	1.36				4.31	2.01			15.97

TABLE 42. 1981 BRITISH COLUMBIA TRAWL LANDINGS (T) OF GROUNDFISH FROM STATISTICAL AREA 29

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ENGLISH S.		.39	.09										.48
ROCK SOLE		.17		.02									.19
PETRALE S.													
DOVER SOLE													
REX SOLE													
BUTTER SOLE													
FLATHEAD S.													
SAND SOLE													
TURBOT													
STAR.FLDR													
OTHER FLAT.		.45	1.18										1.63
PACIFIC COD		12.00	27.42										39.42
LINGCOD		.19											.19
SABLEFISH													
POLLOCK	4.08	209.56	14.59	1.41	.45								230.09
OCEAN PERCH													
BOCACCIO													
CANARY RF													
REDSTR. RF													
ROUGHEYE RF													
SIL'GRAY RF													
YEL'MOUTH R													
YEL'TAIL RF		.02											.02
WIDOW RF													
OTHER RF	.06	1.01	.36										1.43
HAKE	23.34	39.51	561.10	609.50	200.65								1434.10
OCTOPUS		.04											.04
PERCH													
SKATE		.06	.06										.12
SQUID	.04												.04
STURGEON													
MISC. SP.													
DOGFISH												.54	.54
REDUCTION													
ANIMALFOOD													
TOTAL	27.52	263.40	604.80	610.93	201.10							.54	1708.29
CRAB													
DUMPED FISH													
DISCARDS	9.30	7.17	22.23	29.03									67.73

OTHER GROUNDFISH FISHERIES

Groundfish landings in this category are those caught by longline, trap, handline, troll, and shrimp trawl. In 1981 these landings totalled 5,312 t, a 16% decrease from the 1980 total. Sablefish accounted for 69% of the total catch by other gear, with the landings of 3,655 t, 6% above those of the previous year. Dogfish landings of 513 t declined 69% from the 1980 level. Catches by main species, gear type, and major area are presented in Table 43.

No effort data are available for handline, troll, or shrimp trawl. The catch data for these gears were obtained from sales slips and the report, British Columbia Catch Statistics, 1981, Fisheries and Oceans, Fisheries Management, Pacific Region.

Interviews were conducted with skippers of longline and trap vessels to obtain catch and effort data. In the longline fishery, 54% (by weight) of the total landings of 977 t were covered by these interviews. Table 44 shows the total landings and monitored effort together with monitored landings and CPUE by major area and month. The target species for the longline fishery were dogfish (513 t) and sablefish (380 t). The dogfish fishery was centered in the Strait of Georgia (Area 4B) with 96% (494 t) caught in this area. The sablefish fishery took place mainly in North Hecate Strait (Area 5D) with 74% of the catch. Tables 45-52 show the main species landed by major area and month. Longline landings by minor area in 1981 are presented in Table 53.

Total trap landings in 1981 were 3,276 t a slight increase (2%) from the 1980 level. Ninety percent (by weight) of the trap landings were covered by interviews. Table 54 shows monitored landings, effort and CPUE and total landings by major area and month. Sablefish landings of 3,275 t accounted for 99.9% of the total trap catch. The main areas of production were the west coast of Queen Charlotte Islands (Area 5E) and North Queen Charlotte Sound (Area 5B) in which each area accounted for 30% of the total catch. Trap landings of groundfish in 1981 by major area, month and main species are given in Tables 55-62. A breakdown of the 1981 trap landings by species and minor area is presented in Table 63.

Table 43. British Columbia landings (t, round weight) of groundfish caught by gear other than trawl in 1981 by major area and species.

Gear and Species	Major area								Total
	4B	3C	3D	5A	5B	5C	5D	5E	
Handline and troll									
Lingcod	325.74	228.67	99.91	16.56	8.28	16.01	15.73	11.73	722.63
Pacific cod	6.50	3.38	-	-	-	1.38	1.75	0.25	13.26
Rockfish	201.30	54.15	30.90	4.50	3.30	6.60	6.60	4.35	311.70
Longline									
Dogfish	493.71	9.47	-	-	-	-	10.05	-	513.23
Lingcod	7.85	0.05	0.58	1.09	0.10	0.62	0.97	0.61	11.87
Pacific cod	7.47	-	-	-	-	-	8.36	-	15.83
Rockfish	34.07	0.55	5.00	0.92	0.78	3.50	6.88	3.10	54.80
Sablefish	-	0.19	94.63	-	-	1.14	281.67	2.03	379.66
Misc. species	1.06	-	-	-	-	-	0.28	-	1.34
Trap									
Lingcod	-	0.02	-	0.12	-	0.07	0.04	-	0.25
Rockfish	0.03	0.04	0.26	-	0.07	0.10	0.31	0.09	0.90
Sablefish	1.86	359.94	500.67	328.87	986.18	43.63	62.15	991.77	3,275.07
Misc. species	-	-	-	-	-	-	0.03	-	0.03
Shrimp trawl									
Flatfish	2.35	0.48	-	-	-	-	-	-	2.83
Lingcod	0.78	1.73	0.21	-	-	-	-	-	2.72
Pacific cod	2.09	0.06	-	-	-	-	-	-	2.15
Pollock	0.05	-	-	-	-	-	-	-	0.05
Rockfish	1.93	1.08	-	-	-	-	-	-	3.01
Misc. species	1.06	-	-	-	-	-	-	-	1.06
Total	1,087.85	659.81	732.16	352.06	998.71	73.05	394.82	1,013.93	5,312.39

Table 44. Total landings (t), monitored landings (t), and monitored effort (hooks x 1,000) for the British Columbia longline fleet in 1981 (excludes halibut).

	Major Area											
	4B				3C				3D			
Month	Total landings (t)	Monitored landings (t)	Monitored effort (hooks × 1000)	Monitored CPUE (t/1000 hooks)	Total landings (t)	Monitored landings (t)	Monitored effort (hooks × 1000)	Monitored CPUE (t/1000 hooks)	Total landings (t)	Monitored landings (t)	Monitored effort (hooks × 1000)	Monitored CPUE (t/1000 hooks)
January	4.38	-	-	-	-	-	-	-	-	-	-	-
February	7.38	-	-	-	-	-	-	-	-	-	-	-
March	3.98	-	-	-	-	-	-	-	-	-	-	-
April	8.09	2.17	2.99	0.726	-	-	-	-	0.24	0.24	1.63	0.147
May	3.41	-	-	-	-	-	-	-	0.31	-	-	-
June	2.08	-	-	-	0.50	-	-	-	-	-	-	-
July	5.50	-	-	-	0.07	-	-	-	32.04	-	-	-
August	6.28	-	-	-	-	-	-	-	5.88	-	-	-
September	2.74	0.61	12.00	0.051	-	-	-	-	29.18	-	-	-
October	113.47	84.01	122.08	0.688	9.47	-	-	-	32.56	-	-	-
November	204.30	149.70	164.82	0.908	0.22	-	-	-	-	-	-	-
December	182.55	143.43	214.25	0.669	-	-	-	-	-	-	-	-
Total	544.16	379.92	516.14	0.736	10.26	-	-	-	100.21	0.24	1.63	0.147

Table 44 (cont'd)

Month	Major Area											
	5A				5B				5C			
	Total landings (t)	Monitored landings (t)	Monitored effort (hooks × 1000)	Monitored CPUE (t/1000 hooks)	Total landings (t)	Monitored landings (t)	Monitored effort (hooks × 1000)	Monitored CPUE (t/1000 hooks)	Total landings (t)	Monitored landings (t)	Monitored effort (hooks × 1000)	Monitored CPUE (t/1000 hooks)
January	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-
April	0.73	0.73	1.02	0.716	-	-	-	-	1.94	-	-	-
May	-	-	-	-	0.88	-	-	-	0.47	-	-	-
June	-	-	-	-	-	-	-	-	1.04	-	-	-
July	0.93	-	-	-	-	-	-	-	-	-	-	-
August	-	-	-	-	-	-	-	-	1.81	-	-	-
September	0.35	-	-	-	-	-	-	-	-	-	-	-
October	-	-	-	-	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.01	0.73	1.02	0.716	0.88	-	-	-	5.26	-	-	-

Table 44 (cont'd)

Month	Major Area: 5D Total landings (t)	5D Monitored landings (t)	5D Monitored effort (hooks × 1000)	5D Monitored CPUE (t/1000 hooks)	5E Total landings (t)	5E Monitored landings (t)	5E Monitored effort (hooks × 1000)	5E Monitored CPUE (t/1000 hooks)	Total Total landings (t)	Total Monitored landings (t)	Total Monitored effort (hooks × 1000)	Total Monitored CPUE (t/1000 hooks)
January	-	-	-	-	-	-	-	-	4.38	-	-	-
February	-	-	-	-	-	-	-	-	7.38	-	-	-
March	-	-	-	-	-	-	-	-	3.98	-	-	-
April	-	-	-	-	-	-	-	-	9.06	3.14	5.64	0.557
May	2.59	-	-	-	-	-	-	-	9.13	-	-	-
June	137.80	-	-	-	-	-	-	-	140.85	-	-	-
July	43.59	12.49	18.48	0.676	1.11	1.11	6.25	0.178	84.28	13.60	24.73	0.550
August	57.82	57.47	191.68	0.300	2.23	2.23	5.76	0.387	72.21	59.70	197.44	0.302
September	12.22	12.17	69.40	0.175	2.40	2.40	21.60	0.111	48.70	15.18	103.00	0.147
October	54.19	54.17	240.00	0.226	-	-	-	-	209.69	138.18	362.08	0.382
November	-	-	-	-	-	-	-	-	204.52	149.70	164.82	0.908
December	-	-	-	-	-	-	-	-	182.55	143.43	214.25	0.669
Total	308.21	136.30	519.56	0.262	5.74	5.74	33.61	0.171	976.73	522.93	1,071.96	0.488

Table 45. 1981 British Columbia longline landings (t) of groundfish--International Area 4B, Strait of Georgia.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	0.73	4.58	-	2.17	-	-	-	-	-	110.83	199.40	176.00	493.71
Lingcod	-	0.24	-	0.58	0.80	0.70	1.50	0.70	1.17	0.70	1.46	-	7.85
Pacific cod	0.41	-	-	-	0.01	0.18	2.31	4.36	-	-	0.05	0.15	7.47
Rockfish	3.24	2.55	3.95	5.30	2.05	1.18	1.69	1.22	1.57	1.77	3.28	6.27	34.07
Sablefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. species	-	0.01	0.03	0.04	0.55	0.02	-	-	-	0.17	0.11	0.13	1.06
Total	4.38	7.38	3.98	8.09	3.41	2.08	5.50	6.28	2.74	113.47	204.30	182.55	544.16

Table 46. 1981 British Columbia longline landings (t) of groundfish--International Area 3C, southwest coast of Vancouver Island.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	-	-	-	9.47	-	-	9.47
Lingcod	-	-	-	-	-	-	0.05	-	-	-	-	-	0.05
Pacific cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	-	0.31	0.02	-	-	-	0.22	-	0.55
Sablefish	-	-	-	-	-	0.19	-	-	-	-	-	-	0.19
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	0.50	0.07	-	-	9.47	0.22	-	10.26

Table 47. 1981 British Columbia longline landings (t) of groundfish—International Area 3D, northwest coast of Vancouver Island.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lingcod	-	-	-	0.24	0.18	-	-	-	0.06	0.10	-	-	0.58
Pacific cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	0.13	-	-	-	3.56	1.31	-	-	5.00
Sablefish	-	-	-	-	-	-	32.04	5.88	25.56	31.15	-	-	94.63
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	0.24	0.31	-	32.04	5.88	29.18	32.56	-	-	100.21

Table 48. 1981 British Columbia longline landings (t) of groundfish—International Area 5A, south Queen Charlotte Sound.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lingcod	-	-	-	-	-	-	0.76	-	0.33	-	-	-	1.09
Pacific cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	0.73	-	-	0.17	-	0.02	-	-	-	0.92
Sablefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	0.73	-	-	0.93	-	0.35	-	-	-	2.01

Table 49. 1981 British Columbia longline landings (t) of groundfish--International Area 5B, North Queen Charlotte Sound.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lingcod	-	-	-	-	0.10	-	-	-	-	-	-	-	0.10
Pacific cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	0.78	-	-	-	-	-	-	-	0.78
Sablefish	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	0.88	-	-	-	-	-	-	-	0.88

Table 50. 1981 British Columbia longline landings (t) of groundfish—International Area 5C, South Hecate Strait.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lingcod	-	-	-	-	-	-	0.53	-	0.09	-	-	-	0.62
Pacific cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	1.94	0.47	0.51	-	0.58	-	-	-	3.50
Sablefish	-	-	-	-	-	-	-	-	1.14	-	-	-	1.14
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	1.94	0.47	1.04	-	1.81	-	-	-	5.26

Table 51. 1981 British Columbia longline landings (t) of groundfish--International Area 5D, North Hecate Strait.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	1.84	8.21	-	-	-	-	10.05
Lingcod	-	-	-	-	-	0.41	0.25	0.31	-	-	-	-	0.97
Pacific cod	-	-	-	-	0.90	2.55	2.76	2.06	0.09	-	-	-	8.36
Rockfish	-	-	-	-	-	2.29	1.87	2.65	0.07	-	-	-	6.88
Sablefish	-	-	-	-	1.69	132.55	36.64	44.56	12.06	54.17	-	-	281.67
Misc. species	-	-	-	-	-	-	0.23	0.03	-	0.02	-	-	0.28
Total	-	-	-	-	2.59	137.80	43.59	57.82	12.22	54.19	-	-	308.21

Table 52. 1981 British Columbia longline landings (t) of groundfish—International Area 5E, west coast of Queen Charlotte Islands.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dogfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Lingcod	-	-	-	-	-	-	-	-	0.61	-	-	-	0.61
Pacific cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	-	-	-	2.23	0.87	-	-	-	3.10
Sablefish	-	-	-	-	-	-	1.11	-	0.92	-	-	-	2.03
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	1.11	2.23	2.40	-	-	-	5.74

Table 53. British Columbia longline landings (t) by species by minor area in 1981.

Species	Minor Area												
	2AW	2BW	1E	4	5up	2BE	8	11	25	26	27	23	24
Dogfish	-	-	10.05	-	-	-	-	-	-	-	-	9.47	-
Lingcod	0.61	-	0.72	0.25	-	0.62	0.10	1.09	-	0.30	0.28	0.05	-
Pacific cod	-	-	7.71	0.65	-	-	-	-	-	-	-	-	-
Rockfish	3.04	0.06	6.18	0.36	0.34	3.50	0.78	0.92	0.46	-	4.54	0.24	0.31
Sablefish	2.03	-	278.15	3.52	-	1.14	-	-	-	-	94.63	-	0.19
Misc. species	-	-	0.23	0.05	-	-	-	-	-	-	-	-	-
Total	5.68	0.06	303.04	4.83	0.34	5.26	0.88	2.01	0.46	0.30	99.45	9.76	0.50

Species	Minor Area										
	12	13	14	15	16	17	18	19	28	29	Total
Dogfish	-	2.78	82.33	11.43	165.50	46.67	12.50	6.31	14.15	152.04	513.23
Lingcod	0.61	0.61	0.63	0.06	2.70	0.62	2.44	-	0.18	-	11.87
Pacific cod	-	-	0.31	0.01	0.01	0.37	5.39	1.37	-	0.01	15.83
Rockfish	1.27	1.80	4.75	1.63	4.03	7.41	12.04	-	0.18	0.96	54.80
Sablefish	-	-	-	-	-	-	-	-	-	-	379.66
Misc. species	-	-	-	-	0.50	0.27	0.12	-	0.17	-	1.34
Total	1.88	5.19	88.02	13.13	172.74	55.34	32.49	7.68	14.68	153.01	976.73

Table 54. Total landings (t), monitored landings (t), and monitored effort (traps) for the British Columbia trap fleet in 1981.

Month	Major Area											
	4B				3C				3D			
	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)
January	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	54.73	54.73	3,855	0.0142	82.17	82.17	7,565	0.0109
April	-	-	-	-	94.73	55.02	3,555	0.0155	8.71	8.71	984	0.0089
May	-	-	-	-	73.84	53.07	4,020	0.0132	77.87	77.87	6,885	0.0113
June	-	-	-	-	64.71	50.21	6,275	0.0080	131.12	131.12	8,868	0.0148
July	-	-	-	-	55.34	14.61	2,050	0.0071	18.23	18.23	2,790	0.0065
August	-	-	-	-	14.44	14.44	2,650	0.0054	126.88	126.88	16,260	0.0078
September	-	-	-	-	-	-	-	-	20.50	20.50	2,650	0.0077
October	1.89	1.89	675	0.0028	2.21	2.21	1,125	0.0020	32.89	32.89	2,620	0.0126
November	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	2.56	2.56	120	0.0213
Total	1.89	1.89	675	0.0028	360.00	244.29	23,530	0.0104	500.93	500.93	48,742	0.0103

Table 54 (cont'd)

Month	Major Area 5A				5B				5C			
	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/traps)	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)
January	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-
March	4.88	4.88	290	0.0168	108.22	108.22	3,120	0.0347	-	-	-	-
April	59.08	59.08	2,632	0.0224	26.51	26.51	2,595	0.0102	-	-	-	-
May	79.38	51.21	2,820	0.0182	165.88	165.88	6,720	0.0247	17.39	13.50	960	0.0141
June	69.68	69.68	1,404	0.0496	77.38	77.38	4,900	0.0158	-	-	-	-
July	45.32	45.32	3,480	0.0130	178.61	98.42	5,580	0.0176	-	-	-	-
August	3.92	3.90	480	0.0081	183.79	183.79	9,240	0.0199	-	-	-	-
September	4.89	4.89	680	0.0072.	47.50	47.50	1,860	0.0255	-	-	-	-
October	46.51	46.51	3,690	0.0126	133.55	133.55	11,540	0.0116	17.46	17.46	2,775	0.0063
November	-	-	-	-	-	-	-	-	-	-	-	-
December	15.35	15.35	540	0.028	64.81	64.81	3,540	0.0183	8.95	8.95	540	0.0166
Total	329.01	300.82	16,016	0.0188	986.25	906.06	49,095	0.0185	43.80	39.91	4,275	0.0093

Table 54 (cont'd)

Month	Major Area: 5D				5E				Total			
	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)	Total landings (t)	Monitored landings (t)	Monitored effort (traps)	Monitored CPUE (t/trap)
January	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	263.02	192.08	5,746	0.0334	513.02	442.08	20,576	0.0215
April	0.42	-	-	-	79.30	79.30	5,427	0.0146	268.75	228.62	15,193	0.0150
May	-	-	-	-	9.09	9.09	1,200	0.0076	423.45	370.62	22,605	0.0164
June	-	-	-	-	102.35	102.35	4,011	0.0255	445.24	430.74	25,458	0.0169
July	-	-	-	-	172.27	157.17	7,860	0.0200	469.77	333.75	21,760	0.0153
August	13.13	-	-	-	53.53	53.39	5,640	0.0095	395.69	382.40	34,270	0.0112
September	-	-	-	-	129.54	129.54	8,210	0.0158	202.43	202.43	13,400	0.0151
October	48.98	48.98	7,410	0.0066	142.68	142.68	9,130	0.0156	426.17	426.17	38,965	0.0109
November	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	40.08	40.08	1,860	0.0215	131.75	131.75	6,600	0.0200
Total	62.53	48.98	7,410	0.0066	991.86	905.68	49,084	0.0185	3,276.27	2,948.56	198,827	0.0148

Table 55. 1981 British Columbia trap landings (t) of groundfish--International Area 4B, Strait of Georgia.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	-	-	-	-	-	0.03	-	-	0.03
Sablefish	-	-	-	-	-	-	-	-	-	1.86	-	-	1.86
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	1.89	-	-	1.89

Table 56. 1981 British Columbia trap landings (t) of groundfish—International Area 3C, southwest coast of Vancouver Island.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	-	-	0.02	-	-	-	-	-	o.02
Rockfish	-	-	-	-	-	-	-	-	-	0.04	-	-	0.04
Sablefish	-	-	54.73	94.73	73.84	64.71	55.32	14.44	-	2.17	-	-	359.94
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	54.73	94.73	73.84	64.71	55.34	14.44	-	2.21	-	-	360.00

Table 57. 1981 British Columbia trap landings (t) of groundfish--International Area 3D, northwest coast of Vancouver Island.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	0.23	-	-	-	-	-	-	0.03	-	-	0.26
Sablefish	-	-	81.94	8.71	77.87	131.12	18.23	126.88	20.50	32.86	-	2.56	500.67
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	82.17	8.71	77.87	131.12	18.23	126.88	20.50	32.89	-	2.56	500.93

Table 58. 1981 British Columbia trap landings (t) of groundfish--International Area 5A, south Queen Charlotte Sound.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	0.12	-	-	-	-	-	-	-	-	0.12
Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-
Sablefish	-	-	4.88	58.96	79.38	69.68	45.32	3.90	4.89	46.51	-	15.35	328.87
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	4.88	59.08	79.38	69.68	45.32	3.90	4.89	46.51	-	15.35	328.99

Table 59. 1981 British Columbia trap landings (t) of groundfish--International Area 5B, north Queen Charlotte Sound.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	-	-	-	-	-	-	-	0.07	-	-	0.07
Sablefish	-	-	108.22	26.51	165.88	77.38	178.61	183.79	47.50	133.48	-	64.81	986.18
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	108.22	26.51	165.88	77.38	178.61	183.79	47.50	133.55	-	64.81	986.25

Table 60. 1981 British Columbia trap landings (t) of groundfish--International Area 5C, south Hecate Strait.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	0.07	-	-	-	-	-	-	-	0.07
Rockfish	-	-	-	-	-	-	-	-	-	0.10	-	-	0.10
Sablefish	-	-	-	-	17.32	-	-	-	-	17.36	-	8.95	43.63
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	17.39	-	-	-	-	17.46	-	8.95	43.80

Table 61. 1981 British Columbia trap landings (t) of groundfish--International Area 5D, north Hecate Strait.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	-	-	-	0.04	-	-	-	-	0.04
Rockfish	-	-	-	-	-	-	-	0.10	-	0.21	-	-	0.31
Sablefish	-	-	-	0.42	-	-	-	12.96	-	48.77	-	-	62.15
Misc. species	-	-	-	-	-	-	-	0.03	-	-	-	-	0.03
Total	-	-	-	0.42	-	-	-	13.13	-	48.98	-	-	62.53

Table 62. 1981 British Columbia trap landings (t) of groundfish—International Area 5E, west coast Queen Charlotte Islands.

Species	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lingcod	-	-	-	-	-	-	-	-	-	-	-	-	-
Rockfish	-	-	0.09	-	-	-	-	-	-	-	-	-	0.09
Sablefish	-	-	262.93	79.30	9.09	102.35	172.27	53.53	129.54	142.68	-	40.08	991.77
Misc. species	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	263.02	79.30	9.09	102.35	172.27	53.53	129.54	142.68	-	40.08	991.86

Table 63. British Columbia trap landings (t) by species by minor area in 1981.

Species	Minor Area									
	1W	2AW	2BW	1E	4	2BE	5Lo	6	8	11
Lingcod	-	-	-	0.04	-	-	0.07	-	-	0.12
Rockfish	-	0.09	-	0.11	0.20	0.01	0.02	0.07	0.07	-
Sablefish	6.87	567.18	417.72	7.82	54.33	9.05	18.93	15.65	986.18	328.87
Misc. species	-	-	-	0.03	-	-	-	-	-	-
Total	6.87	567.27	417.72	8.00	54.53	9.06	19.02	15.72	986.25	328.99

Species	Minor Area								
	25	26	27	21	23	24	13	15	Total
Lingcod	-	-	-	-	0.02	-	-	-	0.25
Rockfish	0.03	-	0.23	-	0.04	-	0.02	0.01	0.90
Sablefish	217.39	115.37	167.91	23.97	182.51	153.46	0.86	1.00	3,275.07
Misc. species	-	-	-	-	-	-	-	-	0.03
Total	217.42	115.37	168.14	23.97	182.57	153.46	0.88	1.01	3,276.25

CATCH BY INPFC AREA

This report is also produced to satisfy requirements of committees of the International North Pacific Fisheries Commission (INPFC) (Canada, Japan, and United States). To complement the previous tables, groundfish landings in metric tons (t) are presented in Tables 64-66 for trawl and other gears according to INPFC areas. The relationship between these areas and the major areas used in the first portion of the report is as follows:

INPFC Area	Major Area	Latitude
Charlotte	5A, 5B, 5C, 5D, 5E[5]	50°30'N - 54°30'N
Vancouver	3B[5], 3C[6], 3D, 4B[7]	47°30'N - 50°30'N

[5]Northernmost 10 miles actually in Southeastern.
[6]Southernmost 10 miles actually in Columbia.
[7]Inside waters (Strait of Georgia).

Table 64. British Columbia landings (t) of groundfish taken by all types of gear in 1981 by INPFC area.

Species	Area		
	Vancouver	Charlotte	Total
English sole	136.48	1,363.15	1,499.63
Rock sole	141.47	917.82	1,059.29
Petrale sole	198.16	92.29	290.45
Dover sole	364.08	881.26	1,245.34
Rex sole	0.96	188.99	189.95
Starry flounder	16.39	181.58	197.97
Turbot	122.62	823.58	946.20
Other flatfish	149.45	33.45	182.90
Pacific cod	2,657.00	4,050.56	6,707.56
Lingcod	1,407.52	1,059.05	2,466.57
Sablefish	1,097.44	2,790.33	3,887.77
Pollock	575.52	675.86	1,251.38
Hake	5,691.47	-	5,691.47
Pacific ocean perch	547.87	4,555.27	5,103.14
Other rockfish	632.97	4,224.40	4,857.37
Misc. species	38.84	227.22	266.06
Dogfish	1,074.62	76.06	1,150.68
Animal food	3.09	38.46	41.55
Reduction	46.57	255.81	302.38
Total	14,902.52	22,435.14	37,337.66

Table 65. British Columbia trawl landings (t) of groundfish in 1981 by INPFC area.

Species	Area		Total
	Vancouver	Charlotte	
English sole	136.48	1,363.15	1,499.63
Rock sole	141.47	917.82	1,059.29
Petrale sole	198.16	92.29	290.45
Dover sole	364.08	881.26	1,245.34
Rex sole	0.96	188.99	189.95
Starry flounder	16.39	181.58	197.97
Turbot	122.62	823.58	946.20
Other flatfish	146.62	33.45	180.07
Pacific cod	2,637.50	4,038.82	6,676.32
Lingcod	741.98	987.12	1,729.10
Sablefish	140.15	92.89	233.04
Pollock	575.47	675.86	1,251.33
Hake	5,691.47	-	5,691.47
Pacific ocean perch	547.87	4,555.27	5,103.14
Other rockfish	303.66	4,183.30	4,486.96
Misc. species	36.72	226.91	263.63
Dogfish	571.44	66.01	637.45
Animal food	3.09	38.46	41.55
Reduction	46.57	255.81	302.38
Total	12,422.70	19,602.57	32,025.27
Effort (h)			

Table 66. British Columbia landings (t) of groundfish caught by gear other than trawl in 1981 by INPFC area.

Species and gear	Area		Total
	Vancouver	Charlotte	
Handline and troll			
Lingcod	654.32	68.31	722.63
Pacific cod	9.88	3.38	13.26
Rockfish	286.35	25.35	311.70
Longline			
Dogfish	503.18	10.05	513.23
Lingcod	8.48	3.39	11.87
Pacific cod	7.47	8.36	15.83
Rockfish	39.62	15.18	54.80
Sablefish	94.82	284.84	379.66
Misc. species	1.06	0.28	1.34
Trap			
Lingcod	0.02	0.23	0.25
Rockfish	0.33	0.57	0.90
Sablefish	862.47	2,412.60	3,275.07
Misc. species	-	0.03	0.03
Shrimp trawl			
Flatfish	2.83	-	2.83
Lingcod	2.72	-	2.72
Pacific cod	2.15	-	2.15
Pollock	0.05	-	0.05
Rockfish	3.01	-	3.01
Misc. species	1.06	-	1.06
Total	2,479.82	2,832.57	5,312.39